

Garden Annual



GEO. KELLER & SONS

**909 Maine Street
QUINCY, ILLINOIS**

the Best of the New

Here at our store we try to keep one step ahead and always offer you the "best of the new." The newest flowers, vegetables, garden supplies and especially the latest information on successful gardening.

In line with this policy, each year we announce the All America Awards. This year only one flower received this honor. The fiery, Blaze Zinnia.

Again there were no introductions in the vegetable world this year which the judges felt merited an award. Instead, they have chosen from past winners, a family garden of the 24 best vegetables.

ALL-AMERICA SELECTIONS

1954

ALL AMERICA

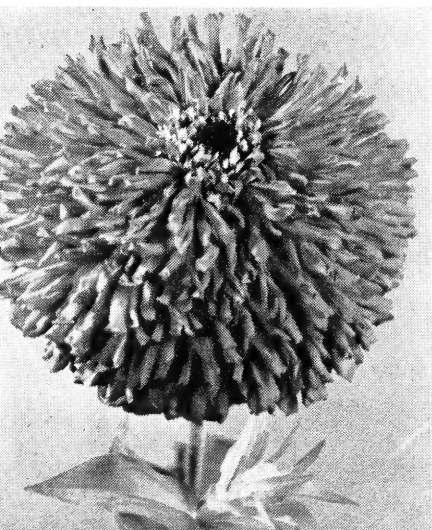
Zinnia—Blaze

The fiery red and orange hybrid giant Zinnia **Blaze** was the only flower winner of the All America Award for 1954.

Unique and distinct it is a combination of fiery mandarin red and scarlet orange. The flowers are bigger than those of the dahlia flowered zinnias and the petal formation is varied, of the informal fluffy or ruffled type.

Blaze is true to color and its stem length and keeping qualities make it truly an exhibition flower. Zinnias are one of the most popular and easiest growing of all our annuals because they thrive in our hot summers.

Seeds may be sown in a sunny window and transplanted, but it is best to sow later in the open ground. Zinnias will thrive in almost any soil and are one of the best and most colorful cut flower annuals.



Flowers That Have Had The Test of Time

The past 20-odd years have seen some outstanding developments in flowers, both in attainment of striking range of color and in disease resistant, all-around healthier stronger plants. It's interesting to see which of these flowers have remained popular and have stood the test of time.

Marigolds hold top place among varieties chosen for All America Awards, with Petunias coming a close second.

The following All America selections have remained favorites in the flower garden:

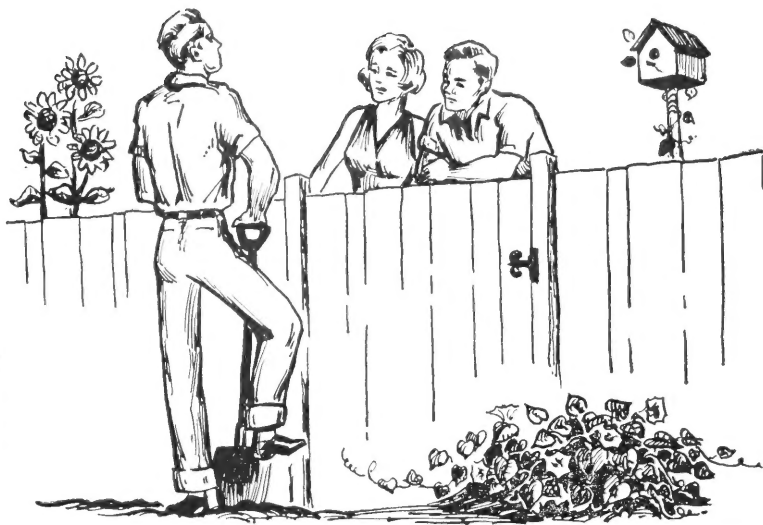
ANCHUSA—Blue Bird
CALENDULA—Sunshine
CLEOME—Pink Queen
CORNFLOWER (Centaurea)—Jubilee Gem
COSMOS—Dazzler, Fiesta, Radiance, Sensation.
CYNOGLOSSUM—Firmament
HUNNEMANNIA—Sunlite
MARIGOLD—Melody, Spry, Scarlet Glow, Sunkist, Real Gold, Mammoth Mums, Yellow Supreme.
MORNING GLORY — Pearly Gates, Scarlett O'Hara
NASTURTIUM — Glorious Gleam Hybrids, Golden Gleam, Golden Globe, Scarlet Gleam.
PANSY—Swiss Giants
PETUNIA — America, Comanche, English Violet, Fire Chief, Flaming Velvet, Silver Medal.
PHLOX—Art Shades
TITHONIA—Torch
VERBENA — Lavender Glory, Spectrum Red
ZINNIA—Persian Carpet.

The 1954 All- America Garden

This is the family garden of 24 kinds of vegetables of the best varieties ever introduced which was chosen as the 1954 All America Vegetable Garden. You can be assured of the best quality, highest yields and tastiest vegetables when you plant these "Re-Selected All America Vegetables."

LIMA BEAN—Fordhook 242
SNAP BEAN—Topcrop
BEET—Perfected Detroit
CABBAGE (Savoy)—Chieftain
CABBAGE (Plain)—Penn State Ball-head
CANTALOUPE—Honey Rock
CARROT—Imperator
CAULIFLOWER—Ideal Snowball
CORN (Sweet)—Iochief
CUCUMBER—Marketer
ENDIVE—Full Heart
LETTUCE (Head)—Great Lakes
LETTUCE (Leaf)—Salad Bowl
MUSTARD—Giant Southern Curled
OKRA—Clemson Spineless
ONION—Sweet Spanish (Valencia)
PARSLEY—Paramount
PEA—Freezonian
PEPPER—Sweet Banana
RADISH—Cherry Belle
SPINACH—America
SQUASH—Early Prolific Straightneck
TOMATO—Pritchard
WATERMELON — Congo, New Hampshire Midget

OVER THE GARDEN GATE



We're seedsmen by trade and gardeners by nature, and that's why we know that the cultivation of beauty and the achievement of satisfaction depend to a great extent on the understanding with which they are practiced.

This year there will be more gardens than ever before, because Americans are realizing that both flowers and vegetables are essential to good living. Modern science has done much to make the gardener's work easy, to help him grow bigger and better flowers and vegetables and growers are constantly striving to make these disease resistant and more productive.

Scientists are tirelessly searching for ways to improve the soil structure, enrich it, eradicate weeds, get rid of insect pests and to provide tools which make gardening a pleasure instead of a chore.

The last two years have seen the introduction of soil conditioners which transform poor soil into loam, rendering it more friable and loose, increasing water retention, better aeration and facilitating plant root development.

There's even a weed preventer, preventing weeds before they grow!! This product kills the weed seeds when they are in their most vulnerable state, just as they are beginning to sprout. This alone helps

prevent most of the home gardeners' weeding "backaches," because the weeds are killed before they get a chance to become a problem.

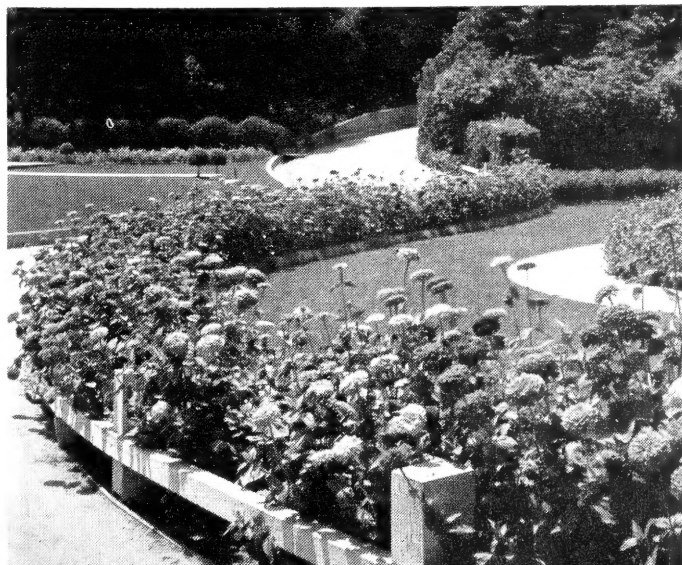
The real secret behind this weed preventer is that it *isn't* weed killer when it's sprayed. But soil bacteria work on it and actually change it to another chemical, one that kills weed seeds as they're starting to sprout. And, since it isn't a weed killer when you put it on, there's little or no danger of damaging the leaves of other garden plants.

There is no limit to miracles of science, and each step is in the right direction, encouraging more and more men and women to "grow their own."

We are glad that the public interest is centered on home gardening and we want to do everything we can to help you enjoy your gardens and to learn how to better take advantage of the miracles of science, right in your own yard.

Gardening is an expression of one's self . . . be it the beauty of a flower garden, the even turf of a well-kept lawn, the wealth of a bountiful vegetable garden, well tended shrubs or even one plant or one garden. But whatever it is, it's there because you put it there yourself and the responsibility of its well-being, and the beauty and satisfaction it may give, is in your hands. Happy gardening to you!

Try zinnias for a colorful border, bright as a summer day.



A bountiful vegetable garden for the whole family.





Let us help you Plan a Garden



Proper staking for space conservation

Yes, indeed, and it's a pleasure for us to present this Garden Annual to you, because it's full of good, down-to-earth gardening information, designed to help **you**, our neighbor, have the best garden in town.

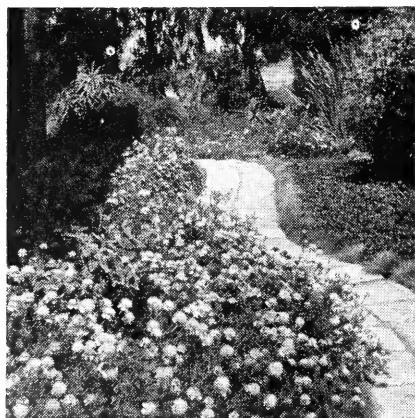
We've always made it our job to serve the gardeners and growers in our area (both in our store and by means of this book) and we work with the needs of our neighbors' gardens in mind. We know from experience exactly what our local needs are, and we choose our stocks carefully to suit these needs.

We offer a complete year-round, local garden service, and our knowledge of gardening is part of our stock in trade. As seed professionals we know what you'll need every step of the way.

You will find that this, your Garden Annual, is far more than a seed catalog, it is a practical gardening reference book. In these pages, as well as in our store you'll find the answer to most of your gardening needs.

Drop in and see us soon and make our store your Gardening Headquarters.

MAIL ORDERS: On mail orders, all packet seeds are sent postpaid. On all other items, add parcel post charges to your remittance.



An ideal border is colorful all season

GEO. KELLER & SONS

909 Maine Street

QUINCY, ILLINOIS

Whether you're a beginner or an experienced gardener, we're sure that you'll find much that is helpful in this catalog. You can begin to use it right now as a guide for your planting, then later on, use it as a guide to more effective action through the season.

Many gardeners like to govern their planting by the phases of the moon, and we have compiled for them all the necessary information. It's fascinating, and certainly worth a try. Be sure and look at the **Moon Planting Guide on page 27**. Although, as seedsmen, we can't vouch for the effectiveness of this method, we are glad to provide this complete and up-to-date chart for those who want it.

Have you ever wondered **how deep seed should be planted? How far apart in rows? Time to maturity? Shape? When to plant?** All these questions are answered for you in a handy **Vegetable Planting Guide** found on page 38 of our Garden Annual.

And flowers—there's a complete **Flower Garden Planning Guide** on page 19, which will tell you which flowers you should plant for dry hot places—for a succession of blooms—shady locations—poor soil—edging—for the rock garden—for their foliage—fragrance—background—In fact, everything you want to know before you start planning your flower garden.

Explicit step by step instructions are given on page 20 to help you build and maintain a beautiful lawn.

If you have any special problem with your lawn and haven't been able to correct it, call on us. We've been working with lawns right here in this area for years and know the right seed and right diagnosis for nearly any lawn problem you might have.

All this and more information has been compiled in this book to help you towards better gardening, so plan now to use it as a handbook all year round. And plan to come in and see us soon.

By the way, if any of your gardening friends have not received this catalog and would like to have a copy, just let us know. But please do so early, as the supply is limited.

GEO. KELLER & SONS

909 Maine Street

QUINCY, ILLINOIS



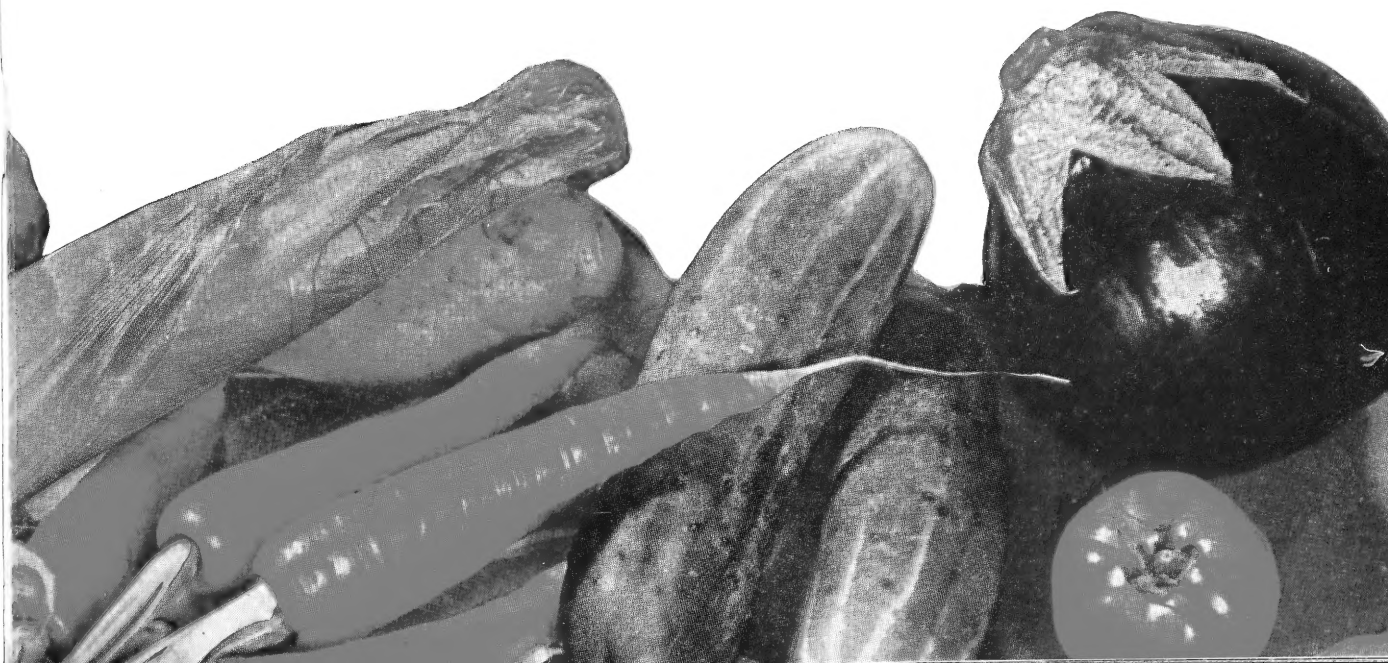
Proper dusting to control the Mexican bean beetle. Care is taken to hit the undersides of the leaves.



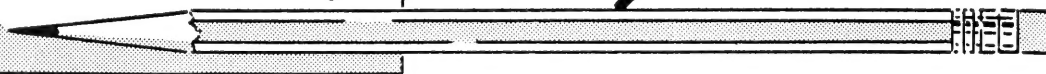
Reaping the harvest. A well tended garden gives ample returns as seen in the mess of peas being picked.

WARRANTY

Our Company warrants to the extent of the purchase price that seeds or bulbs sold are as described on the container within recognized tolerances. Seller gives no other or further warranty, express or implied.



A Pencil and Paper is the Starting Point



A well planned garden is started on paper first. There are several reasons for this, but the main one is to keep your garden producing during all the growing season.

Chart it out to scale on paper and keep a record so that you can rotate your crops correctly as well as plan your succession crops, catch crops, and inter-crops. You will save ground space too, and that means less watering and less weeding to be done. **Sit down and use the pencil and you save standing up and using the hoe.**

On page 38 of our Garden Annual you will find a comprehensive guide that will give you all the information you need to plan your garden on paper. The amount of seed required, the proper spacing between seeds and rows,

the growing period and the approximate yields are all shown in this guide.

The best procedure is to start with a rough sketch. Try all your ideas in combinations during this rough sketch stage. When you have what you want, convert your rough sketch into a final plan, drawn to scale. A scale of one quarter of an inch representing one foot works very well, because by using one sixteenth of an inch as three inches, almost any standard spacing of the rows can be shown in exact scale.

The most important point to remember in planning your vegetable garden is family preference. If they're fond of beans, for instance, don't be satisfied with a single large planting, but make several smaller plantings at two week intervals.

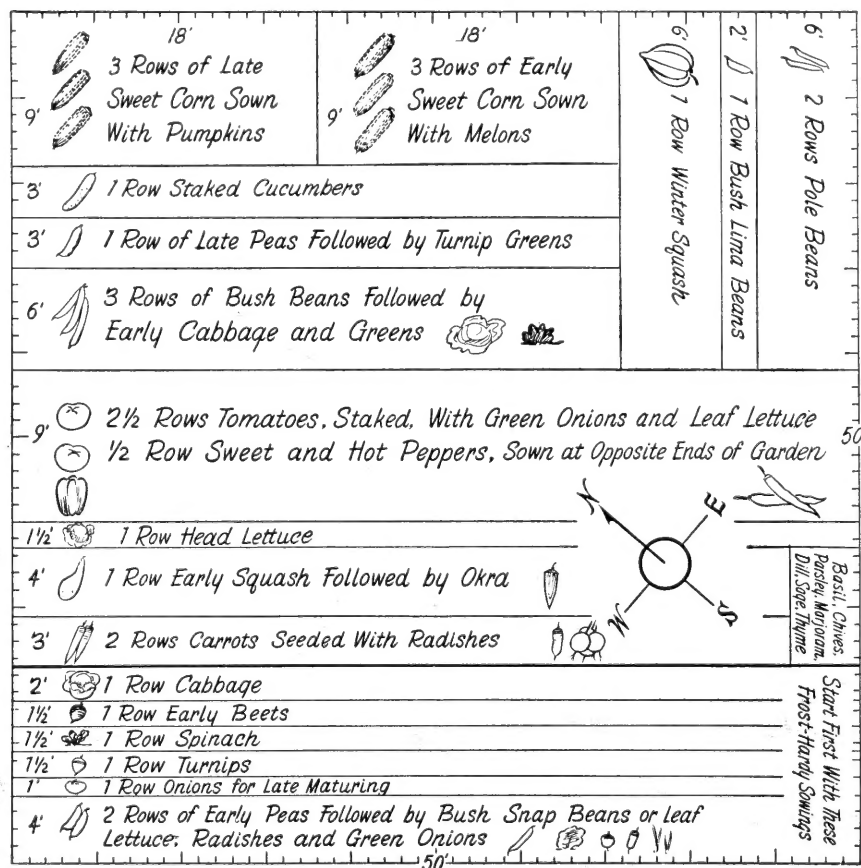
Divide the garden into three sections if possible.

(1) Root vegetables, (2) Leaf vegetables, (3) Fruit vegetables.

By switching these three groups every year you avoid many soil-borne diseases and insects and get better use of fertilizers. This isn't absolutely necessary, but it is one of those details that the smart gardener watches.

High growing vegetables such as sweet corn, pole beans and staked tomatoes should preferably be on the north side of your garden, otherwise they will ultimately cut off the life-giving sunlight from your lower growing vegetables. **Your sweet corn area is better planned if it is grouped in a square rather than a long row or two.** This insures better and easier pollinization.

A SUGGESTED 50' x 50' GARDEN



Substitutions

Mustard Garden Cress } Plant early in space later required by spreading squash vines.

Summer Squash

Spinach Spinach } Plant early in space later required by spreading squash vines.

Beans—Lima or Green Soy

Bush Beans followed by late Lettuce

Bush Beans followed by Cauliflower

Late Peas followed by late Cabbage

Midseason Peas followed by late Cabbage

2nd early Peas followed by Rutabagas

1st early Peas followed by Brussels Sprouts

Carrots, Radishes, followed by Kohlrabi

Early Beets followed by Carrots, Radishes

Lettuce followed by late Beets

Kohlrabi followed by Endive

These plans will produce a balanced diet for a family of four. Climbing vine crops and tomatoes can be tied to adjoining fences thus saving space and staking work.

Crops that remain in the garden throughout the entire growing season should be located where they will not be disturbed. Early crops should be planted together. When they are harvested, the space can be used again for fall crops.

Successive cropping should be practiced in every garden. This may be carried out in two ways. One crop may follow another in the same season . . . late cabbage or sweet corn may be planted in the space from which early peas, beans, lettuce or radishes have been harvested. Or successive planting of the same crop may be made at intervals of seven to ten days. This will provide a continuous supply of such crops as sweet corn, string beans, spinach and radishes.

Companion cropping is also important. This is the growing of two or more crops on the same area at the same time. Quick maturing crops like spinach, beans, kale, lettuce and radishes may be planted between the rows of eggplant, tomatoes, melons, okra or other crops that occupy the ground during the entire season. The early crops will have time to mature and be harvested before the later ones will require the entire space for full development.

With your plans complete, you are now ready to order your fertilizer, seeds, tools and insecticides. It is to your advantage to do this as early as you can. Late in the season many desirable varieties may be sold out.

Pointers

A rich sandy loam is the best garden soil, but if you have either heavy clay or light sand, the same materials will improve both—the new soil conditioners, decayed vegetable matter—old rotted manure, peat moss, commercial humus or well-rotted leaves.

Don't apply lime unless it is really needed. Usually a soil that will grow good beets is all right. If beets do poorly and grow irregularly, you can add about 50 lbs. of hydrated lime or 100 lbs. of ground limestone to each 1,000 square feet of garden. If you have a pH tester, most flowers and vegetables will do well in a soil between 6.0 and 7.0.

Do supply plant food. Before digging or plowing the garden, apply 4 lbs. of balanced fertilizer over every 100 sq. ft. of garden. Divide fertilizer into two lots, sowing one with the wind and the other across the wind. Better yet, use a fertilizer spreader.

Don't plant in wet ground. No soil is right for gardening that can't pass the "mud pie" test. To make a mud pie test, pick up a handful of soil and squeeze it slightly. If it balls or packs together and won't crumble when you apply light pressure, it is entirely too wet to work.

COSMOS SENSATION	TITHONIA TORCH	CLEOME HELEN CAMPBELL	HELIANTHUS	COSMOS RADIANCE	MARIGOLD GLITTERS	LARKSPUR REGAL LILAC	COSMOS ORANGE RUFFLES	ZINNIA WILL ROGERS	
AGERATUM BLUE CAP	GAILLARDIA PICTA	SNAP-DRAGON	CENTAUREA BLUE BOY	SCABIOSA PEACE	AGERATUM BLUE PERF.	PHLOX MIXED	SNAP'S TETRA	NICOTIANA PETUNIA AMERICA	
DIANTHUS	AGERATUM MIDGET BLUE	POPPY SHIRLEY	ALYSSUM SAXATILE	ASTER BALLEE	POPPY	PETUNIA FINE CHIEF	CANDYTUFF WHITE	MARIGOLD DWARF	AGERATUM BLUE CAP

PLAN FOR A GARDEN OF ANNUALS (approximately 25 feet long)

Planning the flower garden is fun. Here your skill as a gardener shows its true artistry. Your imagination can focus on flower selections for height, colors, shapes and contrasts. Successfully arranging bushy and sparse plants, shaggy blossoms and the delicate varieties in orderly patterns of beauty is one of the greatest thrills the flower gardener enjoys. The possibilities are endless.

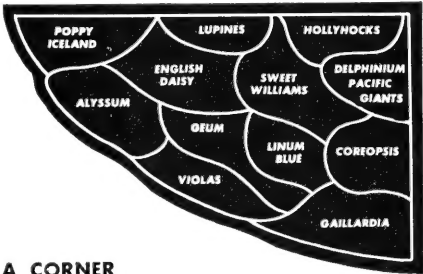
Galvanized wire, staked out flush to the ground, bent and spliced at the intersections is helpful in permanently establishing a plan like the one shown above. Observe how this arrangement places the tall flowers in the back, and the shortest in the foreground. Not only does this provide maximum display of each variety, but cultivation is made easier and with little disturbance to adjoining plants.

DELPHINIUM PACIFIC GIANTS	COREOPSIS	HOLLYHOCKS MIXED		LUPINES RUSSELL'S MIXED	DELPHINIUM BLUE SHADES	
PHLOX PERENNIAL	AUBRIETIA	LINUM BLUE	GEUM	GAILLARDIA MONARCH	AQUILEGIA	TRITOMA
ENGLISH DAISY	ALYSSUM SAXATILE	VIOLAS	ARABIS	ARMERIA	SHASTA DAISY ALASKA	

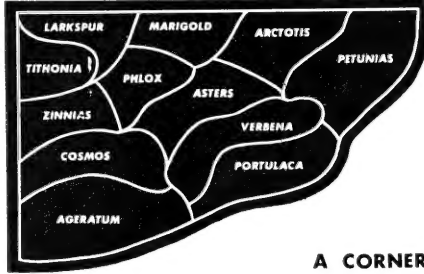
A PERENNIAL GARDEN (approximately 25 feet long)

Over each flower listed in the Flower Seed section are shown the height, culture key and whether it is perennial, annual or biennial. By using page 19 as a help you can estimate germination and blooming periods so that a constant succession of blooms or simultaneous blooming can

be planned. The blueprints shown here are "pure" annual and perennial beds. The gardener who transplants perennials and biennials from cold frames or clay pots into annual beds or carefully sows annuals into his perennial beds can improve the over-all plan considerably.



A CORNER OF PERENNIALS



A CORNER OF ANNUALS

Plant with the Sun in Mind

When planning your garden, it's important to know which flowers will do well in bright sunlight, in partial shade and in deep shade. Of course, the ideal garden spot receives at least six hours of sunlight.

Assuming that you have such a spot, the choice is unlimited for garden beauty and any of the blueprints of gardens shown above will be suitable.

However, if your garden spot receives only little sunshine during the day, you can have a very attractive planting by using Sweet Alyssum and Nempholia as an edging. They both grow only to a height of 6 to 9 inches and can be planted where they are to grow. Another excellent shade-tolerant edger is the Pansy.

For the middle of the shady annual border, the double Camellia-flowered Balsam, Cornflowers, Calendula, Anchusa, Godetia will be very effective.

For a background you might use Nicotiana, or Flowering Tobacco for a fine color range from white through pink, salmon and rose to a deep maroon. They are delightfully fragrant and make excellent cut flowers. Cleome or Spider-Flower is another tall variety for the background, as is Clarkia.

For deep shade, your choice is limited, but there are a few flowers which will make a good showing in the very shady border. They are: Anemone, Cardinal Flower, Columbine, Pansy and Primrose. Dwarf Phlox and Ferns make beautiful paths under tree and Violets will grow almost anywhere.

It's important to keep the shady border well watered, for the flowers that do well have little heat tolerance and cannot stand hot, dry weather.

Provide good drainage, and be sure to lighten heavy earth with sand and humus.

GEO. KELLER & SONS

909 Maine Street

QUINCY, ILLINOIS

Presenting

We are proud to offer you the finest flower seed in the world, and the varieties listed on the following pages are guaranteed to give you color and beauty in your garden.

Each year, a number of varieties are introduced which deserve a trial in the home garden. Some are novelties, others improved strains of old favorites. The supply of seed the first year of introduction is naturally limited, so they are not carried in our regular listings.

However, to keep you up-to-date on the newest in beauty, here are the descriptions of some of the best of the 1954 introductions.

Sweet Pea, Little Sweetheart—A completely new class of this very popular flower. Especially bred for the home gardener to use for borders, bedding or pot plant culture. It forms a perfect mound of flowers 8" high and wide. Flowers are of the Ruffled Spencer type and come in a full color range.

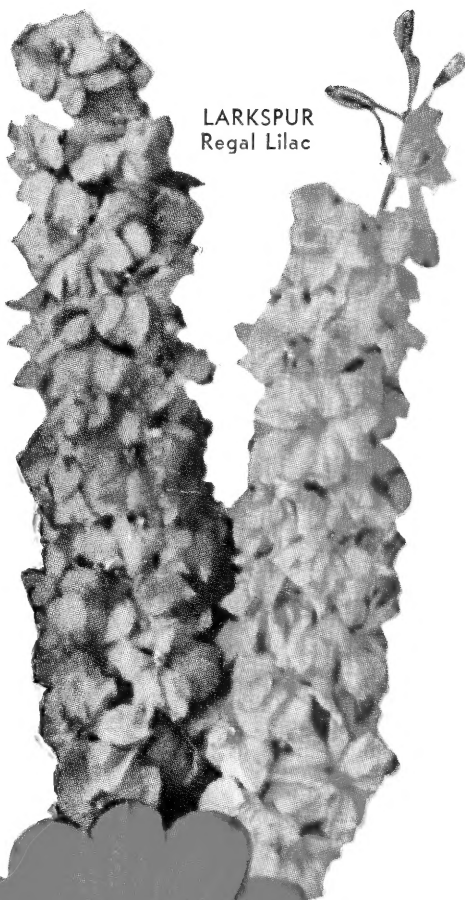
Hearts and Honey—A novelty flower "touched with magic." One of the most colorful and unusual flowers ever offered. An annual climbing vine which produces masses of flowers. In the early morning the flowers are a brilliant orange, with a honey-like yellow center. Towards noon, a pinkish red with lighter center. In the late afternoon the flowers are a clear bright shade of rose pink with a white center.

Petunia Grandiflora Fringed Crusader—An F¹ Hybrid in the bi-color of deep rose and white which was seen in the Maltese Cross.

Bells of Ireland—An interesting novelty about 2 feet tall with a long graceful stem. Both foliage and flowers are the same attractive light green color. Flowers practically cover the stem and are delicately veined delightfully starred with a small white center.

LIMITED WARRANTY: Our Company warrants to the extent of the purchase price that seeds or bulbs sold are as described on the container within recognized tolerances. Seller gives no other or further Warranty, express or implied.

LARKSPUR
Regal Lilac



TITHONIA,
Torch





ZINNIA, Dahlia Flowered

TOMORROW'S *Flowers* NOW !

KEY TO SYMBOLS

The symbols below the name of each flower give you the following information. (a)—Annual (b)—Biennial (hp)—Hardy Perennial.

The Culture Number shown for each variety refers to the "How to Grow" information on page 18.

AGERATUM

(a) Culture I, 4-9"

BLUE PERFECTION—A deep amethyst blue. Grows to 9 inches high.

MIDGET BLUE—Small 4-inch plants are covered with azure blooms. Pkt. 25c.

ALYSSUM

(a) Culture II (hp) VI, 4-6"

CARPET OF SNOW (a)—Easily grown dwarf annual. Fragrant snow white flowers last from early summer until frost.

ROYAL CARPET—In drifts of vibrant purple color or used as a neat edging for the flower bed. This companion for Carpet of Snow grows only a few inches high and 10 inches across. Has no pest or disease troubles. Pkt. 35c.

SAXATILE (hp)—Dwarf perennial. Golden flowers in spring.

ANCHUSA

(a) Culture I, 2'

BLUE BIRD—Bushy plants with sprays of blue, white-eyed flowers. 15c.

ANTIRRHINUM—Snapdragon

(a) Culture, I, 1 1/2-3"

TALL GIANT, LARGE FLOWERED—Large 3 foot spikes, huge flowers.

MAXIMUM—Tallest kind. All colors. Handsome and erect. Pkt. 25c.

SUPER-MAJESTIC Giant Flowered—Semi-tall to 2 feet. Large garden flowers. Pkt. 25c.

TETRA—Immense flowers in many fine colors. Many spikes. Mixed. Pkt. 25c.

MAGIC CARPET—A delightful new little snapdragon especially well suited to edgings and use in rock garden. Pkt. 25c.

AQUILEGIA—Columbine

(hp) Culture VI, 2 1/2"

MRS. SCOTT ELLIOTT'S LONG SPURRED—Large colorful blooms. 30c.

ARABIS—Rock Cress

(hp) Culture VI, 1'

Creeping plants with small flowers in early spring. Fine for edging. 25c.

ARCTOTIS—Blue-Eyed African Daisy

(a) Culture I or II, 3'

GRANDIS—Two-inch daisies of pearly white with bluish center. 15c.

ALL FLOWER SEEDS

10¢ Per Packet

UNLESS OTHERWISE NOTED



MARIGOLD, Glitters



ARMERIA—Thrift

(hp) Culture VI, 1 1/2'

Dwarf rock plants with grassy foliage and globular flowerheads. Pkt. 25c.

AUBRIETIA—Purple Rock Cress

(hp) Culture VI, 6"

A creeper with large colorful flowers in spring. Ideal with bulbs. 25c.

ASTER

(a) Culture 1 1/2-2 1/2'

WILT RESISTANT SUPER GIANT, MIXED—An entirely new class of base branching, heavy stemmed fluffy ostrich feather flowers. Packet 25c.

AMERICAN BRANCHING—Four inch double flowers of compact form. Brilliant.

GIANT CREGO Wilt Resistant—Large 4-inch flowers with fluffy effect. All colors.

POWDERPUFF—New. Pink, azure, rose, crimson, white, scarlet and blue. Solidly made of 3-3 1/2" fully-double flowers. Each plant 24" tall, yet takes up less than 12" space—all the flowers are on top. Often 20 long-tipped cut flowers per plant. Highly wilt-resistant. 25c.

QUEEN OF THE MARKET—Early. Short plants. Compact double flowers. Mixed. Marvellous blend of colors.

SUNSHINE—4" flowers. Loose row of petals, quilled center. Pkt. 20c.

BABY BLUE EYES—SEE NEMOPHILA

BABY'S BREATH—SEE GYPSOPHILA

BACHELOR'S BUTTONS—Centaurea, Cornflower

(a) Culture II or IV, 3'

BLUE BOY—A fine, clear blue. Flowers are large. Colors intense.

JUBILEE GEM—Dwarf, 1' plant. Large, frosty blue blooms. Mixed—All colors.

BLANKET FLOWER—SEE GAILLARDIA

BALLOON VINE—

Love in a Puff

(a) Culture I, 10' to 15'

A clear, free-growing vine with small white flowers, and balloon-like seeds. 15c.

BALSAM—Lady Slipper

(a) Culture II, 1 1/2-2'

MIXED—Double Camellia-like flowers all summer on bushy plants.

BELLIS PERENNIS—SEE DAISY, ENGLISH

BLUE LACE FLOWER—SEE DIDISCUS

BRACHYCOME—SEE DAISY, SWAN RIVER

BURNING BUSH—SEE KOCHIA

BUTTERFLY FLOWER—SEE SCHIZANTHUS

CALENDULA—Pot Marigold

(a) Culture II or IV, 1 1/2'

SUNSHINE—Golden flowers with drooping petals. Odorless. 25c.

SUNSET SHADES—Large flowers in shades: yellow and orange. 15c.

PACIFIC BEAUTY, PERSIMMON—Large, bright, orange, double. 15c.

CALIF. POPPY—SEE ESCHSCHOLTZIA

CALLIOPSIS—Tickseed

(a) Culture II or IV, 1-3'

DWARF MIXTURE—One-foot plants with many colors of yellow and red.

CAMPANULA—Canterbury Bells

(b) Culture VIII, 2'

SINGLE—Large bell-shaped flowers in many colors. Graceful plants. Mixed.



Flowers for the Background

When you plan your flower border, it's necessary to know which flowers to choose for the background. These naturally, should be the tallest varieties, planted in irregular clumps rather than in a row.

The best annuals for the background are:

Antirrhinum (snapdragon)
Campanula (Canterbury Bells)
Celosia
Centaurea
Godetia
Helianthus (dwarf sunflower)
Lavatera
Lupine
Shirley Poppy
Scabiosa
Schizanthus
Marigold
Blue Lace Flower
Zinnia (giant type)
Cleome
Nicotina
Tithonia and Cosmos

Perennials best for background planting are:

Hollyhock
Hardy Aster
Delphinium
Hibiscus

Oriental Poppy and Rudbeckia.

For a more complete guide to height of these flowers, turn to the flower planting guide on page 19.

Suggestions for the Rock Garden

The secret of successful rock gardening lies in following Nature carefully, giving the flowers what they had in their natural habitat.

Light and soil are the two most important factors in the lives of alpine.

The best shade for an alpine is provided by the rocks of the garden, planting on the north or east side of a large rock. Alpines need a porous soil which permits heavy rains to drain quickly. Add plenty of coarse sand or crushed rock to your soil and plenty of humus. Plant crevices while rocks are being laid, not after they are in place. Firm soil around roots to prevent air pockets and group plants of the same kind or color together.

Low-growing, tidy, free-blooming perennials make the most satisfactory rock garden plants. Some of the best perennials for an easy-to-care-for rock garden are: Anemone, Aquilegia, Arabis, Campanula, Crocus, Dwarf Evergreens, Daphne, Dianthus, Gypsophila, Nierembergia and Primula.

Avoid soft and scaly rocks

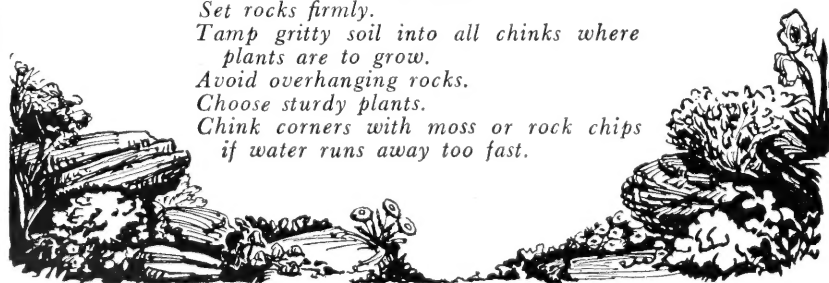
Set rocks firmly.

Tamp gritty soil into all chinks where plants are to grow.

Avoid overhanging rocks.

Choose sturdy plants.

Chink corners with moss or rock chips if water runs away too fast.



DOUBLE—Fine double flowers in blue, pink and white. Mixed.

CUP AND SAUCER—Bell-shaped. Saucer of petals at base. Mixed. 15c.

CANDYTUFT—Iberis

(a) Culture III, 1'

WHITE HYACINTH—Large conical spikes of snowy flowers. Fine for edging.

PERENNIAL GIBALTARICA—Lilac-pink blooms. Needs protection in the winter. Prefers hottest, driest location. Height, 10 to 12 inches. 15c.

SEMPERVIRENS—The perennial white Candytuft. Most desirable perennial for borders and rock gardens. Is evergreen. 25c.

CARDINAL CLIMBER—Imp. Cypress Vine

(a) Culture III, 10-15'

Slender vine with bright green fernlike leaves. Red flowers.

Of course, the lowest growing flowers are used for the foreground of the border and there are a number of beautiful varieties to be chosen of both annuals and perennials.

Although there are numerous annuals which can be used for edging, the best are:

Ageratum, Dwarf
Alyssum
Linum (Scarlet Flax)
Lobelia, dwarf
Nierembergia
Petunia, dwarf
Phlox drummondii
Portulaca
Reseda, dwarf and Verbena.

Perennials which are most generally used for the foreground of the flower border are:

Alyssum (Hardy)
Arabis (Rockcress)
Bellis (English daisy)
Campanula
Dianthus
Iberis
Primrose and Viola

Flowers for the Foreground



CARNATION

(a) Culture I or VIII, 18"

CHABAUD'S GIANTS—Large double flowers with sweet fragrance. All colors. Flower in six months.

CASTOR BEAN—Ricinus

(a) Culture III or VII, 10'

ZANZIBARENSIS—Tall, strong plant for bold effect. Large lobed bright green leaves. Excellent for backgrounds. 15c.

CELOSIA—Cockscomb

(a) Culture I or II, 1-3'

CRISTATA—Low grower with large crested heads, as rooster combs.

PAMPAS PLUMES—Tall, feathery heads in new bronze and sunset shades. Pkt. 25c.

GOLDEN FLEECE—Plumes are huge and dense, on long cutting stems, dozens of them to the plant. Stands any amount of hot weather, pest and disease resistant and will cut-and-come again all season. Pkt. 25c.

CENTAUREA—SEE BACHELOR'S BUTTONS

CHRYSANTHEMUM

(ANNUAL)

(a) Culture II or IV, 1 1/2'

SINGLE PAINTED DAISY, MIXED—Showy daisy-like flowers. Rings of red, yellow, on white, red or yellow flowers. 15c.

CLARKIA

(a) Culture II or IV, 2'

DOUBLE MIXED—Large double flowers in many gorgeous colors. Graceful plant. Does well in light shade. 15c.

CLEOME—Spider Plant

(a) Culture II or IV, 3-4'

PINK QUEEN—A tall plant with many pink flowers. Neat foliage. 15c.

COCKSCOMB—SEE CELOSIA

COREOPSIS

(hp) Culture VI, 2'

SUNBURST—Large, double flowers of rich golden color. Fine for cutting. Sturdy, good grower. 15c.

COLUMBINE—SEE AQUILEGIA

CORN FLOWER—SEE BACHELOR'S BUTTON

COSMOS

(a) Culture II or IV, 3-4'

DAZZLER—Wavy fluted petals of a velvety crimson-maroon. 15c.

FIESTA—Bi-color! Orange colored with scarlet longitudinal stripes. Pkt. 25c.

ORANGE RUFFLES—Semi-double flowers. Golden orange. Airy effect. Pkt. 25c.

RADIANCE—Beautiful, deep rose flowers have a rich crimson zone in center. 15c.

SENSATION MIXED—Huge single flowers, wavy petals, many colors. 15c.

YELLOW RUFFLES—New. Semi-double. Bright yellow. Airy effect. Pkt. 25c.

CYNOGLOSSUM—Chinese Forget-Me-Not

(a) Culture II, 15"

FIRMAMENT—Hundreds of tiny indigo blue flowers. Resemble Forget-me-nots. Bloom all summer. 15c.

DAHLIA

(a) Culture I or II, 14"

UNWIN'S IDEAL BEDDING—Semi-double flowers on low bushes. Fine for beds or borders. Many colors. Pkt. 20c.

DAISY, ENGLISH—Bellis Perennis

(hp) Culture VI, 8"

Low plants with colorful double daisies in early spring. Ideal for beds.

DAISY, SWAN RIVER— Brachycome

(a) Culture II, 10"

MIXED—Many colored small daisy-like flowers freely produced all summer. Good garden stand-by.

DELPHINIUM—Perennial Larkspur

(hp) Culture VI, 5'

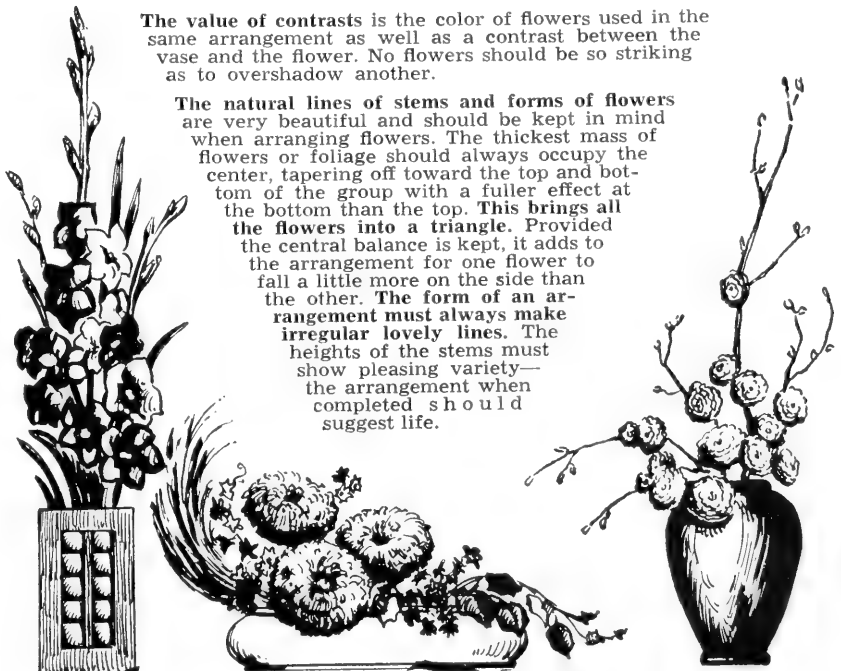
GIANT PACIFIC HYBRIDS—World famous strain of immense double flowers on tall stems. Many new colors. Pkt. 35c.

Arranging Your Flowers

To achieve balance, a knowledge of the form of the flowers or branches used is essential. Every group of flowers must have a central spray of flowers or buds which must be directly over the center of the container.

The value of contrasts is the color of flowers used in the same arrangement as well as a contrast between the vase and the flower. No flowers should be so striking as to overshadow another.

The natural lines of stems and forms of flowers are very beautiful and should be kept in mind when arranging flowers. The thickest mass of flowers or foliage should always occupy the center, tapering off toward the top and bottom of the group with a fuller effect at the bottom than the top. This brings all the flowers into a triangle. Provided the central balance is kept, it adds to the arrangement for one flower to fall a little more on the side than the other. The form of an arrangement must always make irregular lovely lines. The heights of the stems must show pleasing variety—the arrangement when completed should suggest life.



How to Start a Seed Bed

For starting seed indoors, use a shallow box. Place pieces of broken clay pots over drainage cracks to prevent clogging, then spread some soil lumps over the bottom before you fill the box with a mixture of equal parts of sand, soil and peat moss. Pile high in the box. Press down firmly on the sides with your hands. Scrape off surplus soil with a board or tamper. Firm loose soil until it is spread evenly about $\frac{3}{4}$ inch below the top of the seed box.

Then, mark off straight rows about 2 inches apart. Sow seeds uniformly thick, just so they don't touch. Use an old kitchen sieve to screen soil over the top after the seed are sown. Do not cover with more than $\frac{1}{4}$ inch of soil. Use the tamper to firm the soil over the seeds. Water soil after firming. Place a strip of burlap over the box and pour water over it. Never pour water on the bare soil. Another effective way of watering is to place the box in a pan of water. Cover the box with newspaper or a piece of glass to prevent fast drying. Keep moist.

When seedlings appear, remove the newspaper. If you are using glass, leave it on a little longer, but slide it over a bit to give air.

MARIGOLD, Color Magic

DIANTHUS—Pinks

(a) Culture I or VIII, 1'

DOUBLE AND SINGLE MIXED—Fine mixture of colorful, scented, garden pinks. 15c.

GAIETY—Fringed petals in a wide range of flower colors and shapes. Single with lacy appearance. 15c.

DIANTHUS BARBATUS—SEE SWEET WILLIAM

DIDISCUS—Blue Lace Flower

(a) Culture I or II, $2\frac{1}{2}$ '

DIGITALIS—SEE FOXGLOVE

ESCHSCHOLTZIA—California Poppy

(a) Culture III, 1'

Large single poppy-like flowers in many showy colors. Fern-like leaves.

EUPHORBIA—SEE SNOW-ON-THE MOUNTAIN

EVERLASTING FLOWERS

(a) Culture II, $1\frac{1}{2}$ -3'

MIXED—Contains such favorites as Straw-flower and Globe Amaranth. Fine for dried bouquets.

FLOWERING FLAX—SEE LINUM

FOUR O'CLOCK—Mirabilis

(a) Culture III, 2'

Bushy plants covered with flowers of red, pink, white, violet, and yellow. Flowers close in bright sun.

FOXGLOVE—Digitalis

(b) Culture VII, 3'

Tall spikes of lovely thimble-shaped flowers of pink, rose, and purple. Beautiful blooms second year. 20c.

GAILLARDIA—Blanket Flower

(a) Culture II, (hp) VI, 2'

DOUBLE, MIXED PICTA (a)—Showy round flowers with tubular petals. 15c.



NIEREMBERGIA (Dwarf Cup Flowers)

PERENNIAL MONARCH MIXED (hp)—Superb daisy type flowers in shades of red and yellow.

GEUM

(hp) Culture VI, $1\frac{1}{2}$ '

MRS. BRADSHAW—Glowing scarlet flowers. Bright green foliage. Pkt. 20c.

GILLIFLOWER—SEE STOCKS

GLOBE AMARANTH—SEE EVERLASTING FLOWERS

GODETIA—Satin Flower

(a) Culture I or II, 2'

DOUBLE, MIXED—Azalea-like flowers of many colors on bushy plants.

GOURDS, ORNAMENTAL

(a) Culture III, 12'

MIXED—Large and small kinds that will be useful for dried novelties.

GYPSOPHILA—Babys' Breath

(a) Culture I, (hp) VI, $1\frac{1}{2}$ -3'

ANNUAL WHITE (a)—Open, bell-shaped blooms on branching stems give airy touch to garden or bouquet.

PERENNIAL WHITE (hp)—Large loose clusters of small flowers give misty effect. Excellent for cutting.

HELIANTHUS—Sunflower

(a) Culture II, 6'

SUN GOLD—Large double flowers of a brilliant golden yellow.



When transplanting, be sure to firm soil well around plant.

Growing Better Flowers

To make annual plants branch and grow more flowers, most of the plants should have the top of the stem pinched off when they are a few inches high. Remove only the end bud, about $\frac{1}{4}$ ".

Most perennials must be divided every 3 or 4 years. Cut away all the dead roots and stalks. Save the best portions and start afresh.

A good border needs a well prepared sub-soil. Dig deep and condition the sub-soil just once and you needn't bother about it again for many years. To do this, break up heavy sub-soil with sand, peat moss, humus, or lime. Top this off with fine loam. The double dug bed will be higher then before, but it will soon settle.

To have plenty of cut flowers without disturbing your flower borders, plant a few rows of flowers along the edge of your vegetable garden. Or set them out between the rows of early lettuce or radishes, where they can bloom after the vegetables have been used.



ALYSSUM, Royal Carpet



MARIGOLD, Red Head



ASTER, Ballet



CARNATION, Chabaud's Enfants

Plan Your Color Scheme

Imagine the brilliance of an annual garden planted only in yellow and orange, bright and cheerful all summer. It's easy to plan various color schemes with the adaptable annuals available now. All that's required is a sunny spot, reasonably fertile soil and a little imagination. There are countless varieties available, and they are constantly being improved each year. That's why it's fun to experiment with annuals and color.

Your yellow and orange garden could be planted with the following varieties:

Calendula Pacific Golden Giant; **Nasturtium** Golden Gleam; **Zinnia** Persian Carpet; **Celosia** Golden Fleece; **Marigold** Color Magic; **Cosmos** Fiesta; **Cosmos** Orange Ruffles; **Hunnemannia** Sunlite; **Marigold** Sunkist; **Marigold** Naughty Marietta and **Nasturtium** Golden Globe.

A garden of Pinks, Whites and Blues might include: **Sweet Alyssum** Carpet of Snow; **Arctotis** Grandis; **Zinnia** Fantasy Melody; **Phlox** Drummondii Rosy Morn; **Nicotiana**; **Nasturtium** Moon Gleam; **Petunia** Rosy Morn; **Cleome** Helen Campbell; **Cynoglossum** Blue Firmament; **Centaurea** Blue Boy; **Larkspur** Regal Dark Blue and Regal Rose.



CELOSIA,
Golden Fleece

HIBISCUS—Rose Mallow

(hp) Culture VI, 4'

GIANT MIXED—Huge bell-shaped flowers in white, pink, red. Tall plants for damp spots.

HOLLYHOCK

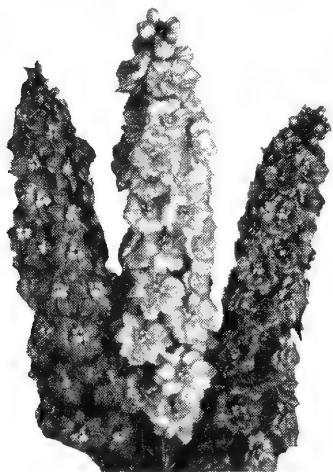
(hp) Culture VI or VIII, 5'

CHATER'S DOUBLE, MIXED—Large double flowers on tall spikes. Bloom in midsummer.

HUNNEMANNIA—Mexican Tulip Poppy

(a) Culture III, 1½'

SUNLITE—Soft yellow double poppy type flower. Bluish fine cut leaves. Different and effective. 15c.



DELPHINIUM
Pacific Giants

IBERIS—SEE CANDYTUFT
IPOMEA—SEE MORNING GLORY

KOCHIA—Burning Bush or Summer Cypress

(a) Culture III, 2½'

Compact pyramid. Needs no trimming. Bright green foliage makes neat, quick hedge. Turns bright red in fall.

LADY SLIPPER—SEE BALSAM

LARKSPUR—Annual Delphinium

(a) Culture II or IV, 3'

REGAL DARK BLUE—Tall spikes of large double flowers in a violet blue. 20c.

REGAL WHITE—Pure glistening white spikes. Tall and stately. 20c.

REGAL PINK—Lively light salmon pink. Glorious when cut. 20c.

REGAL LILAC—Clear lilac with green buds. Tall with fat spike of large florets. 20c.

REGAL ROSE—Rose color. Long, thick spikes with exceptionally large florets. Vigorous and early. 20c.

RUBY—A genuine ruby red. A bright color in garden or bouquet.

GIANT REGAL MIXED—A fine mixture of the above and others.

LAVATERA—Annual Mallow

(a) Culture II, 2-3'

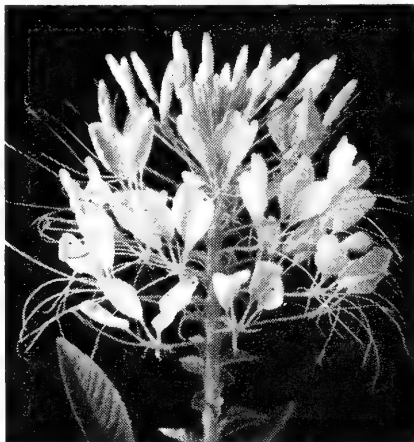
LOVELINESS—Large bowl shaped, rosy pink flowers all summer. Attractive bronzy foliage. 15c.

LINARIA—

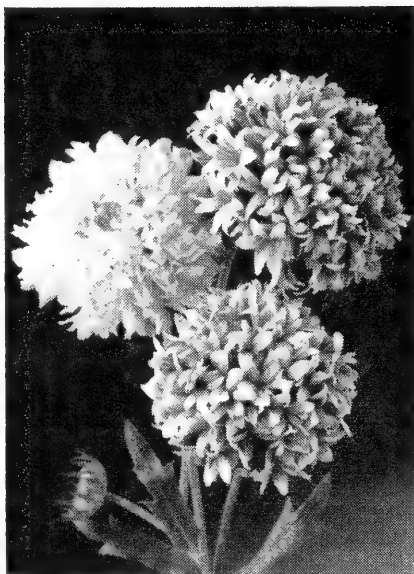
Baby Snapdragon

(hp) Culture I, II, IV or VI

NORTHERN LIGHTS—About 15" high. Brilliant colors. Excellent quick-growing, cutting flower. 25c.



CLEOME, Pink Queen



GAILLARDIA, Double Picta

LINUM—Flowering Flax

(a) Culture III, (hp), VI, 1-2'

SCARLET (a)—Bright red flowers in a constant succession all summer.

PERENNIAL BLUE (hp)—Low bushy plant blooming from spring to midsummer. Small, clear blue flowers in profusion.

LOBELIA

(a) Culture I or V, 4"

CRYSTAL PALACE—Compact border plant with myriads of tiny bright blue flowers. For all low use. 15c.

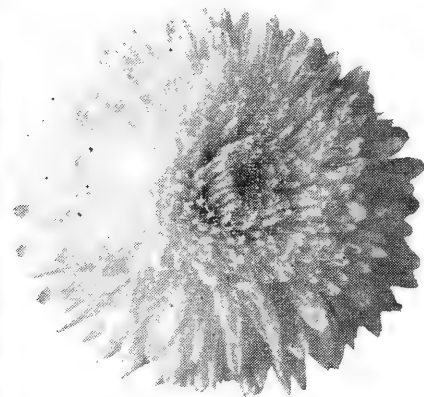
LOVE-IN-A-PUFF—SEE BALLOON VINE

LUPINE

(hp) Culture III or VII, 3'

RUSSELL'S MIXED—Finest of all the lupines! Brilliant colors in long, strong spikes symmetrical closely packed. 20c.

MALLOW, ANNUAL—SEE LAVATERA
MALLOW, ROSE—SEE HIBISCUS



ASTER
Princess Elizabeth

MARIGOLDS

(a) Culture I or II,

African

Tall Types 1½-2'

GLITTERS—Clear yellow. Double. Bushy with long stem. Pkt. 25c.

MAMMOTH MUMS—Chrysanthemum-flowered, blooms in 2½ months from seed. Deep sulphur yellow. 30 inches high.

REAL GOLD—Large carnation-like flowers in striking bright orange. 25c.

SUNSET GIANTS—Huge dahlia-flowered strain. Lemon and gold.

YELLOW SUPREME—Light yellow, large flowers of carnation form.

French

Double Dwarf Types, ½-1'

COLOR MAGIC—New—12 inch mounds covered with variegated colored flowers. An unusual cross in French Marigolds. Flowers are large and combinations are deep gold and henna red. Pkt. 25c.

MELODY—Foot high plants with loads of orange ball-like flowers.

RUBY RED—Compact, with bright red, 2" blooms. Reddest of all. Strikingly different. 20c.

SPRY—Compact plants with showy yellow flowers bordered with mahogany. Distinctive and showy.

SUNKIST—Compact plants with masses of golden orange blossoms. Pkt. 25c.

MARIGOLDS—Continued

Single Dwarf Types, 1-1½"

FLASH—Plants have many 1¾" flowers in tangerine and red shades. Pkt. 25c.

NAUGHTY MARIETTA—Open 2½" flowers are rich gold with maroon at base of petals. Fine for edging. Pkt. 25c.

MIGNONETTE—Reseda

(a) Culture III, 1'

Low grower with tiny, white blooms that are very sweet scented. 15c.

MIRABILIS—SEE FOUR O'CLOCKS

SALMON GLEAM—Delicate golden salmon double flowers.

GLORIOUS GLEAM—A mixture of all the colors of the Gleam series.

NEMOPHILA—Baby Blue Eyes

(a) Culture II, 6"

Many cup-shaped sky-blue flowers on low spreading plant. 15c.

NICOTIANA—Flowering Tobacco

(a) Culture I or II, 2-3'

SENSATION—Long-tube starry flowers. Fragrant at night. White or light pink mixed.

PAINTED TONGUE—SEE SALPIGLOSSIS

PANSY

(a) Culture I, II or VIII, 8"

SWISS GIANTS—Large flowering strain with fine range of gorgeous colors. Best of the improved pansies. Pkt. 35c.

TUFTED PANSY—SEE VIOLA

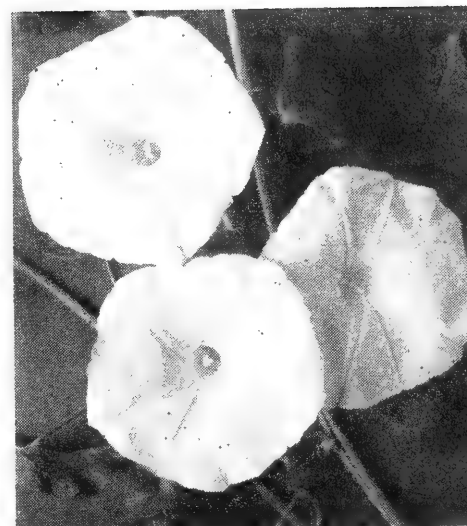
PERIWINKLE—SEE VINCA

PETUNIA

(a) Culture I or IV

Small Flowered, 10-14"

BALLERINA—Bright. Deep rose fringed grandiflora type. Delicately fringed. Pkt. 50c.



IPOMEA White Magic

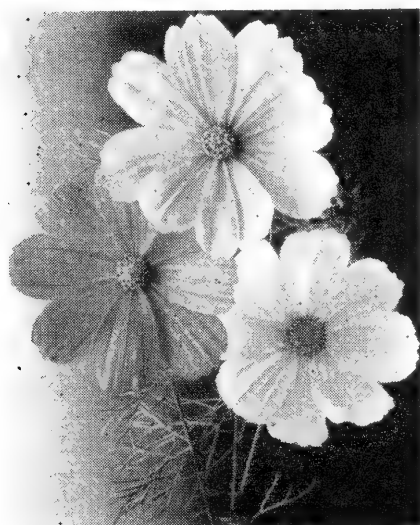
BALCONY—Trailing kinds for use in window boxes and bedding. White, red, rose, or blue.

ENGLISH VIOLET—A fine purple-violet color. Spreading plant. Pkt. 20c.

FIRE CHIEF—Brilliant Red. Compact, and dwarf flowers profusely. Pkt. 25c.

FLAMING VELVET—A velvety blood red. Best of its color. Pkt. 20c.

LIPSTICK—A vigorous new petunia with an unusual glowing color. Plants are compact, early and free-flowering. Pkt. 25c.



COSMOS, Sensation

MORNING GLORY—Ipomea

(a) Culture III, V or VII, 12'

IPOMEA DARLING—Sky blue with five deep blue mid-ribs forming a star. Pkt. 15c.

HEAVENLY BLUE—Sky-blue flowers. Flowers close in bright sun. Exquisite on fences. 15c.

PEARLY GATES—A shining white form of Heavenly Blue. 15c.

SCARLET O'HARA CLIMBING—Large velvety scarlet flowers. Very showy. 20c.

MIXED—Many lovely shades. 15c.

MOSS ROSE—SEE PORTULACA

MOURNING BRIDE—SEE SCABIOSA

NASTURTIUM

(a) Culture III or V

Dwarf or Bush Kinds 1'

GOLDEN GLOBE—Semi-double flowers of bright gold. 15c.

SCARLET GLOBE—Fiery scarlet double. Old-fashioned beauties.

MAHOGANY GLOBE—Deep velvet mahogany red double flowers. 15c.

Tall or Vine Kinds 3-10'

GOLDEN GLEAM—Large golden flowers. Double and fragrant.

SCARLET GLEAM—Fiery orange scarlet flowers. Double and fragrant.

A Home For the Insect Catcher



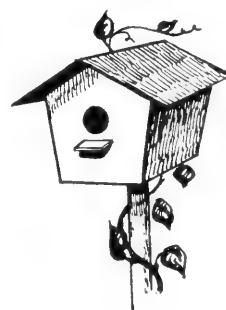
Birds are good neighbors and they need understanding on your part to turn in the best job for you. Give them food, water, safety, and nesting materials and they'll make your garden their home.

When erecting a bird house, take into consideration the size of the bird, nesting habits, the distance from the ground and the locale they like.



The **ROBIN** likes a sheltered shelf open on three sides with an inside space 6" x 8" wide and 8" high. Place the bird house at least 10 to 15 feet above ground.

The **PURPLE MARTIN** seems to be the only one which does well in an apartment. Make each nest space 6" x 6" x 6" with the entrance 1 inch above the floor and about 2½" in diameter. Place the house 15 to 20 feet above ground and equally as far from any buildings and trees.



The **HOUSE WREN** will build in almost anything, but prefers his house 6 to 10 feet above ground with the inside 4" x 4" x 8" high. The entrance 1 to 6 inches above the floor hole with the entrance no larger than ¾" in diameter.

A **BLUEBIRD** will build in a swinging house and his worst enemy, the sparrow will not, so this is an important point to remember. Make his house 5" x 5" x 8" inside, with an entrance 6" above the floor 1½" in diameter, and at least 5 to 10 feet above ground.



VERBENA, *Grandiflora* Mixed



DAHLIA, Unwin's Ideal Bedding Mixed

CALENDULA, *Chrysanthia*



Plant Vines For Effect

Annual vines with their showy, fragrant blossoms, interesting foliage and fruits provide the most beauty in the smallest amount of space.

They provide a background for other plants, hide undesirable views, give privacy and shade and add extra color, fragrance and variety as well as attracting birds, moths and butterflies.

Since annual vines must grow rapidly to provide a great mass of foliage, the soil must be fertile, loamy and well prepared to a depth of at least 12 inches.

Some of the most effective and showy of the annual vines are:

BALLOON VINE—attaining a height of 8 to 10 feet, it is covered with small white flowers over a long period.

HYACINTH BEAN or JACK BEAN—a rapid growing vine with purple and white flowers. The fruit is quite decorative. Needs a sunny location.

CARDINAL CLIMBER—another fast growing vine with fern like foliage. It needs a sunny exposure and produces many small red, trumpet shaped flowers.

ROSE OF HEAVEN—Best of the rose colored strains made famous by Rosy Morn. Color is slightly deeper and more uniform.

SILVER MEDAL—A lovely salmon. Good size flowers on compact plants. Pkt. 50c.

Large Flowered, 12-20"

BURGUNDY—Huge single flowers of a rich wine red, white throat. Pkt. 20c.

COMANCHE—The reddest of red petunias, richer, brighter, more uniform scarlet red. Single flowers 2½ to 2¾ inches in diameter. Grows about 13 inches high. Pkt. 50c.

GIANTS OF CALIFORNIA—Huge flowers of many fine pastel tints. Pkt. 25c.

LITTLE GIANTS MIXED—Compact plants with medium flowers in many new colors and shapes. Pkt. 25c.

SNOW STORM—Large plain glistening white flowers with creamy shading in throat. Very beautiful. Pkt. 25c.

THEODOSIA—Large ruffled flowers of deep rose pink with golden throat. Very showy and lovely. Pkt. 25c.

PHLOX

(a) Culture II, 8-12"

Lovely clusters of showy flowers on low plants from early spring on. Easily grown. Many splendid colors.

Art shades—Rosy Morn, Salmon Glory. 20c. Mixed.

PINKS—SEE DIANTHUS

PINCUSHION FLOWER—SEE SCABIOSA

POPPY

(a) Culture IV (hp) VI, 1½-3'

ICELAND MIXED—Excellent perennial for borders, rock gardens. Large colorful, ferny foliage. Pkt. 20c.

ORIENTAL SCARLET—Huge red blooms in early summer from perennial root. Useful for bold color. Pkt. 20c.

SHIRLEY, MIXED—The easily grown, lovely annual poppy. Many bright colors. Grows easily and self-sows.

PORTULACA—Moss Rose

(a) Culture, III or IV, 6"

SINGLE, MIXED—Many brilliant colors.

DOUBLE, MIXED—All double. Pkt. 20c.

POT MARIGOLD—SEE CALENDULA

SALVIA—Flowering Sage

(a) Culture I, 2-3'

AMERICA OR GLOBE OF FIRE—The well-known Scarlet Sage that is a blaze of vivid scarlet in summer. Pkt. 25c.

SALPIGLOSSIS—Painted Tongue

(a) Culture III, 30"

MIXED—Large petunia-like flowers of rich velvety colors, veined with gold.

SCABIOSA—Mourning Bride, Pincushion Flower

(a) Culture III or IV, 2'

CORAL MOON—New coral shade. Large double flowers on firm cutting stems. Pkt. 15c.

BLUE MOON—Large double flowers of deep lavender blue. 15c.

IMPERIAL GIANTS, MIXED—Large globe-shaped flowers in a wide range of red, white, coral rose and blue. 25c.

SATIN FLOWER—SEE GODETIA

SCARLET FLAX—SEE LINUM

SCARLET SAGE—SEE SALVIA

SCHIZANTHUS—Butterfly-Flower

(a) Culture II or IV, 1½'

MIXED—Small flowers shaped like multi-colored butterflies. Delicate cut leaves. Free flowering. 20c.

SEA LAVENDER—Statice

(a) Culture I, 2'

MIXED—Small tubular flowers in colorful branching spikes. 25c.

SPIDER PLANT—SEE CLEOME

STRAW FLOWER—SEE EVERLASTING FLOWERS

SHASTA DAISY

(hp) Culture VI, 2'

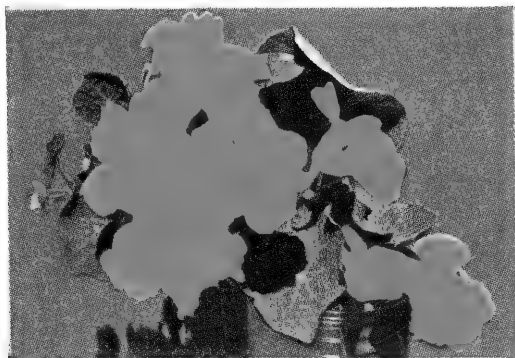
ALASKA—Largest of the Shasta strains. Big, white flowers with yellow centers. 15c.

SNAP DRAGON—SEE ANTIRRHINUM

SNOW-ON-THE-MOUNTAIN—Euphorbia

(a) Culture III, 2'

Bright green foliage edged with white. Good for edging or contrast.



NASTURTIUM, Golden Glean

STOCKS—Gilliflower

(a) Culture I or IV, 1-2'

GIANT IMPERIAL—Excellent double flowers on tall stems. Many bright colors. Pkt. 25c.

DWARF TEN WEEKS—Low growing with strong spikes. Many fine colors. 20c.

WILD FLOWER MIXTURE

(a) Culture II or III, 1/2-3'

Old fashioned flowers in a fine mixture for all season flowering. Sow thinly and enjoy continuous flowers and delightful surprises. These are not wild flowers of the fields but a selection of garden flowers that gives a "wild" garden look when planted in a border. A good way to get acquainted with some of the unusual kinds of garden flowers.

ZINNIA

(a) Culture I or II

Small Types, 12-18"

RED RIDING HOOD—Deep scarlet flowers 1" across. Free flowering. Fine border plant of Lilliput type.

PERSIAN CARPET—Bi-colored. Rich deep tones of red and gold along with sunset shades. Medium-sized blooms on good cutting stems. Pkt. 25c.

LILLIPUT PASTELS—Lovely soft colors in the miniature strain. Fine for borders or small bouquets.

PUMILA SUNSHINE TINTS—Dwarf plants with medium flowers in a wide range of delicate, soft colors.

SCABIOUS FLOWERED — Medium size flowers on a semi-tall plant. Resembles Scabiosa in shape. Bright colors mixed.

TOM THUMB MIXED—Lilliput type flowers on a very dwarf plant. For low borders and miniature displays.

Large Types, 2-2 1/2'

BLAZE—All America 1954—Giant hybrid, fiery red and orange. True to color and flowers are bigger than those of the dahlia flowered zinnias. 25c.

DAHLIA FLOWERED MIXED—Huge flowers in a bewildering range of bright and pastel colors.

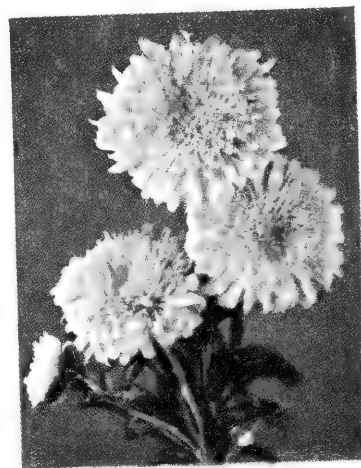
FLORADALE SCARLET—A new and distinct Zinnia. Very uniform and true to type and color. Deep scarlet, slightly smaller than dahlia-flowered, with fluffy, but not twisted petals. Pkt. 25c.

GIANTS OF CALIFORNIA, MIXED—Mammoth flowers in many striking colors. Largest zinnias of all.

PEPPERMINT STICK—Bi-colored! Basic red flowers with white or yellow stripes.



PETUNIA, Comanche



**ASTER
Princess Bonnie**

**PANSY
Swiss Giants**



ZINNIA, Persian Carpet



Flower Culture

The numbers I to VIII found with every flower listing refer to the following cultural notes which give directions for growing all of the flowers we list.

One of the important problems in the garden is that of maintaining a continuous show of bloom. This calls for the use of several different types of annuals, such as those that must be planted early to grow in cool weather. (**Culture IV**) and those which bloom later in summer heat (**Culture I and II**). If some of the cool-weather annuals from **Group IV** are sown in mid-summer and kept well watered, they will grow slowly until the cooler days of fall start them into more active growth. These will produce late flowers. Quick-growing annuals from **Group II** may also be sown at intervals for a succession of bloom during the summer.

Culture I

These flowers need a long season and must be started indoors if a full blooming period is to be had. If early bloom is not important, they will bloom later in the summer when sown directly in the garden. Some gardeners sow both ways to obtain a succession of flowers.

Culture II

These are the quicker-growing annuals that can be sown directly in the garden and will bloom in time to make a good display for most of the summer. If wanted especially early, they should be started as directed indoors in seed beds or flats.

Some flower seedlings are rather delicate. Extra care in preparing the seed bed will pay dividends in better plants. Prepare soil with a liberal amount of mixed fertilizer and organic matter and dig it in. Rake the surface until it is smooth and pulverized. Sow the seed at a depth equal to three times the diameter of the seed. Fine seed can be spread on the surface and pressed in without covering.

Keep soil moist by light spraying until the seedlings have formed the first true leaves. When they are large enough to handle, they may be transplanted to other parts of the garden.

Culture III

These flowers do not transplant well. They should be planted where they are to bloom. Sow as soon as the weather begins to warm in the spring. **Otherwise the culture is the same as II.** Sow seed thinly or remove the smaller plants after they are up. These can be handled as pot-grown plants as in **Culture VII**.

Culture IV

These flowers are unusually hardy annuals that can withstand very cool weather. They are often sown late in fall so they can start growing the first warm days of spring. If not sown in the fall, they should be planted as early in the spring as possible. Fall sowing gets the seeding job out of the way before the spring rush.

Culture V

These flowers, while garden subjects, are also useful for winter-flowering house plants. **For garden use, handle as in Culture II.** For winter flowering indoors, plant fairly late in the season and transplant into small pots as soon as they are large enough. Keep moving them to larger pots as roots fill the soil until they are finally in six-inch pots. Annuals in pots should have at least six hours of direct sunlight daily if they are to flower.

Culture VI

Perennials can be seeded at almost any time of the year. Best periods are early in the spring or in early summer when the rush of spring work is over. A cold frame or sheltered bed which can be shaded from the direct sun is best. Prepare soil thoroughly with plenty of organic matter. A loose, friable soil will produce a thick mat of roots so that the seedlings will transplant more easily. Perennial seedlings are rather weak growers needing extra care. In covering the drills in which the seeds are sown, use either pure, clean sand or a



mixture of half sand and half peat moss. This prevents packing of the soil over the seeds. Always water with a fine spray. As soon as the second leaves form, seedlings may be transplanted into their permanent position. Or, if more convenient, they may be left in the seed bed until the following spring. Under this culture, only a few species will bloom the first year and they will not produce normal flowers until the following year. Planting earlier does increase the chances for flowers the first year. But, if it is more convenient, **Culture I may be used.** Delphinium seed is often started in August to take advantage of the cooler nights for the seed will not grow when the soil temperature is above 77 degrees.

Culture VII

These varieties need a longer growing season than can be given them outdoors. And because they do not transplant well, they must be started in pots and set out without disturbing the roots. **Otherwise Culture is the same as I.** The use of plant bands allows you to set the seedlings out without disturbing the roots. The bands soon rot away and the seedlings will grow as though started in the garden.

If clay pots are used, the excessive drying can be avoided by placing the pots in a flat and filling the space between them with damp peat moss or vermiculite. Be sure to keep this material moist or it will draw moisture from the pots.

Culture VIII

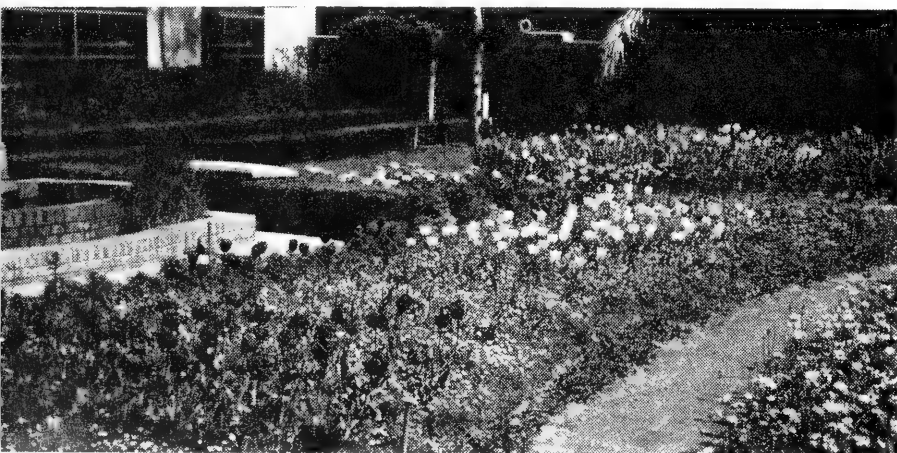
These flowers are biennials. They make a leafy growth the first year but do not flower. The leafy growth of the first year forms food for blooming the following year. The flowers appear the second year and then the plant dies.

This means that a continuing show from biennials must be provided by starting new plants every year to replace those that are flowering.

Biennials are handled in the same way as perennials except that they are started early in the spring to allow the plant to store as much food as possible for the next year's bloom.

Many gardeners start biennials in the vegetable garden or special starting bed and then transplant the ones needed to the flower garden the following spring. During winter, biennials should be given the same treatment as perennials.

Pansies are tender perennials that are treated as annuals or biennials. When grown as annuals, they should be started indoors about six weeks before time for planting out in early spring. When grown as biennials, the seed is started in late summer and the plants carried over winter in protected spots where extreme of temperature and moisture are avoided. Mulching or the use of frames may be necessary in your particular garden. Pansies do best under conditions of constant, moderate moisture, partial shade and a humus-rich soil. Pinching off old flowers will prolong the flowering season.

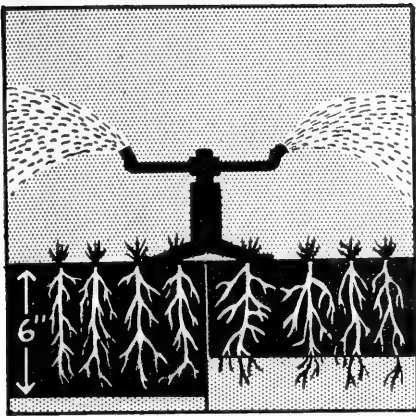


HOME GARDENING GUIDE

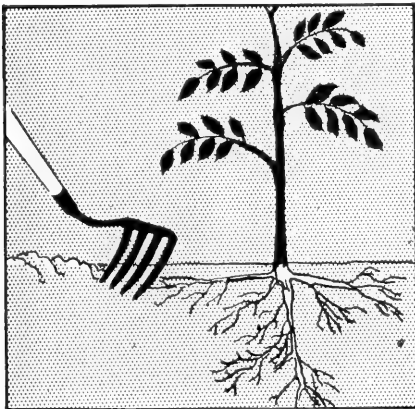
FOR FLOWER GARDEN PLANNING

KEY—For classification of flowers by purpose, location, etc., see the second column below. The meaning of the key letters in this column follows:

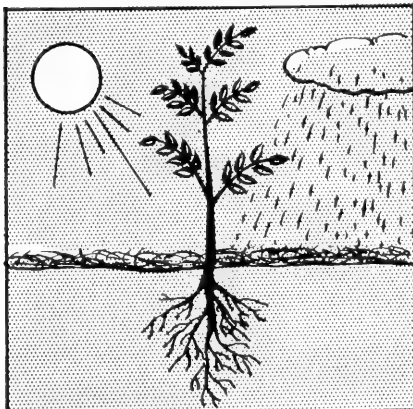
- | | | |
|-------------------------------|------------------------------------|------------------------------|
| A—For dry, hot locations | E—For edging. | I—For their fragrance. |
| B—For a succession of blooms. | F—For the rock garden. | J—For porch or window boxes. |
| C—For shady locations. | G—For their foliage. | K—Climbing vines. |
| D—For poor soil. | H—Everlasting for winter bouquets. | L—For backgrounds. |



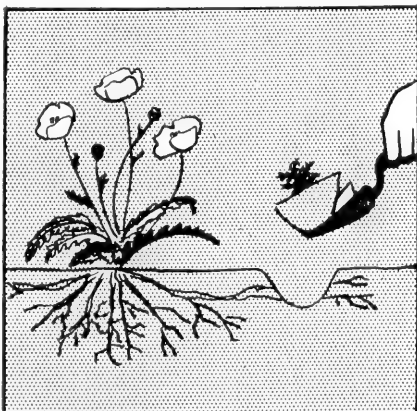
Early morning watering is best. Late watering is risky as the plants dry slowly and are more susceptible to disease.



Restrict your hoeing to the top inch.



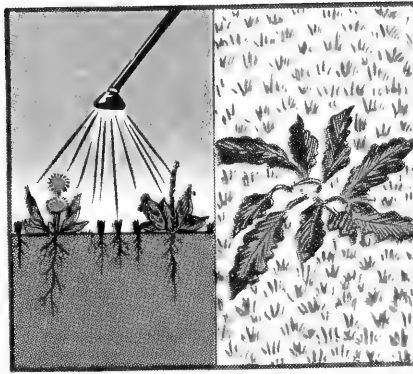
Muching is better than hoeing. Use grass clippings or leaves.



Take out seedlings from phlox, petunias, Oriental poppies and hollyhocks.

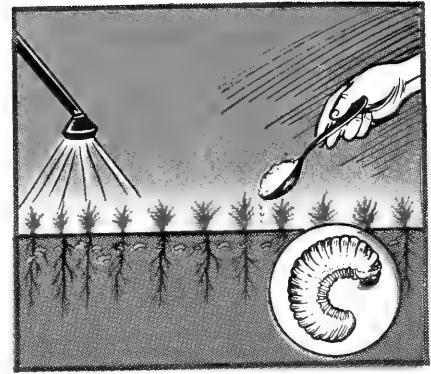
	Height (Inches)	Suitable for	Average Days to Germinate	Approx. Time of Bloom	Shape of Plant
Ageratum	4-12	E F J	5-10	10 Wks.	bushy
Alyssum, Sweet	2-12	B C D E F I J	5-10	6 Wks.	spreading
Antirrhinum	12-60	C I L	20-25	3-4 Mos.	bushy
Aquilegia	18-36	C E F	15	3 Mos.	branchy
Balsam	14-20	A E	10-12	6 Mos.	erect
Calendula	12-36	D	10-14	12-14 Wks.	bushy
Campanula	18-24	F	8-15	10-12 Wks.	bushy
Candytuft	6-18	B F I	5-10	8-10 Wks.	bushy
Centaurea	18-36	A B C D E I J	5-20	3-4 Mos.	erect
Chrysanthemum	24-36	A E	5-20	8-10 Wks.	bushy
Celosia	12-36	D E H	20-25	10 Wks.	bushy
Cosmos	36-60	A	5-15	10-12 Wks.	bushy
Coreopsis	18-36	A B D	10-20	4-5 Mos.	bushy
Dahlia, Dwarf	14	F	10	3-4 Mos.	bushy
Delphinium	36-72	L	15-21	3-4 Mos.	tall
Digitalis	30-48	F	10-20	3-4 Mos.	erect
Dianthus	4-15	F I	5-10	12 Wks.	bushy
Eschscholtzia	10-12	C D F	5-12	12-15 Wks.	bushy
Four O'Clock	24-30	A D	5-10	3-4 Mos.	bushy
Gaillardia	18-30	D	15-20	2-3 Mos.	bushy
Godetia	12-24	C D	15-20	2 Mos.	erect
Gypsophila	18-36	B H	15-20	8-10 Wks.	branching
Helichrysum	24-36	H	5-10	3 Mos.	bushy
Hollyhock	48-84	L	5-20	10 Wks.	slender
Kochia	30-36	A B	15-18	Foliage	bushy
Larkspur, Annual	30-72	L	15-20	10-12 Wks.	tall
Lathyrus	60-72	I K	25-40	2-3 Mos.	vine
Lobelia	4-8	E J	10	10-12 Wks.	bushy
Marigold	8-36	B J	5-8	6-8 Wks.	bushy
Mignonette	10-12	B I		3-4 Mos.	erect
Moon Flower	12 ft. or more	I K	5-8	4-5 Mos.	vine
Morning Glory	12 ft. or more	A K	5-8	3-4 Mos.	vine
Nasturtium	12-36	D E F K	8-15	2-3 Mos.	bush.vine
Nigella	10-18	B F	10-15	10-12 Wks.	bushy
Nicotiana	30-48	I	20-25	10-12 Wks.	branchy
Pansy	4-8	C E F	10-15	10-12 Wks.	clump
Petunia	10-24	D E F J	18-20	10-12 Wks.	bushy
Phlox	10-18	A B C F I J	20-25	8-10 Wks.	bushy
Poppy	18-36	B	20	12-15 Wks.	erect
Portulaca	4-6	A D E F J	18-20	6 Wks.	spready
Salvia	12-42	A	15-25	3-4 Mos.	bushy
Scabiosa	18-30	I	18-20	2-3 Mos.	bushy
Stocks	12-24	I	5-15	12-14 Wks.	bushy
Schizanthus	18-36	C E	20-25	6-8 Wks.	bushy
Sweet Pea	36 or more	K	15-20	10-12 wks.	vine
Sweet William	12-24	F	10	12 Wks.	bushy
Verbena	6-12	E F J	8-10	12 Wks.	spready
Wallflower	12-18	I	5-12	2-3 Mos.	bushy
Zinnia	12-36	A F	5-10	6-8 Wks.	bushy

The Best LAWN in Town



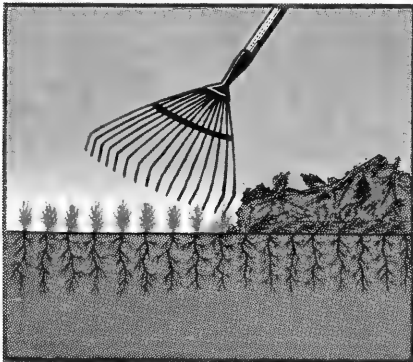
OUR WEED KILLERS DO IT

Get the weeds before they seed. The earlier the start the easier they can be controlled later on. Our selective 2-4D preparations, crabgrass killers and other special types, sprayed on weeds, now makes a formerly difficult chore a comparatively easy one. They stick to weed leaves and are ultimately absorbed into the root system—the leaves turn brown within a few days and in about three weeks they are dead.



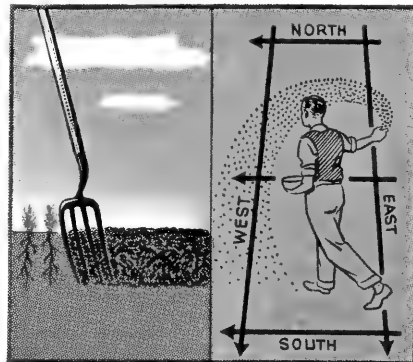
GRUBS CAN DO HEAVY DAMAGE

Beetle grubs feed on grass roots and are extremely destructive, once the infestation is established. Beetles lay their eggs in the ground near the grass roots during the summer months. The hatch (grubs) feed and sever the grass roots during the fall. A lawn turning brown in patches should be examined closely at a three inch depth for grubs. Use our rotenone sprays or poison feed applications to bring them under control.



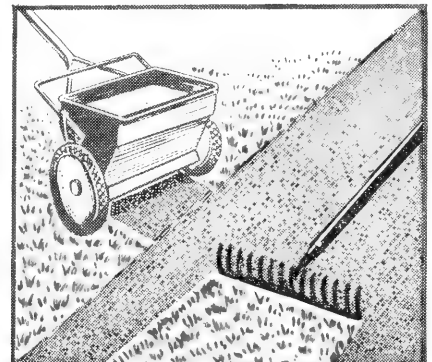
WHISK, DON'T RAKE

Accumulations of debris and leaves on the lawn chokes off growth of new grass and permits nests for harmful insects. A thorough whisking (not a heavy raking that uproots new grass) in early spring and late fall when the weeds have stopped seeding gives old and newly germinated grass a head start in the battle against weeds. Experts recommend that **short** clippings be left on the ground. Long clippings should be gathered.



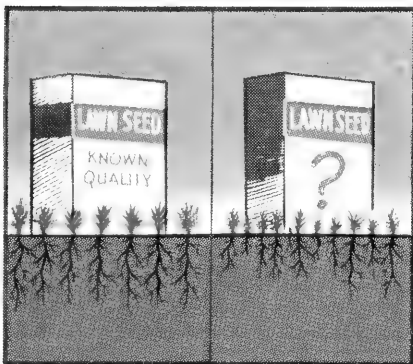
STARTING OVER, SOMETIMES PAYS

(Left) To insure growth from those bare and persistently thin areas: Reseed them as though starting a new lawn. Dig up and pulverize the soil in the bare areas and mix with a balanced fertilizer. Reseed, then roll it sufficiently to press the seed into the soil. (Right) When sowing lawn seed in large areas, choose a windless day. Sow in two directions; one at right angles to the other.



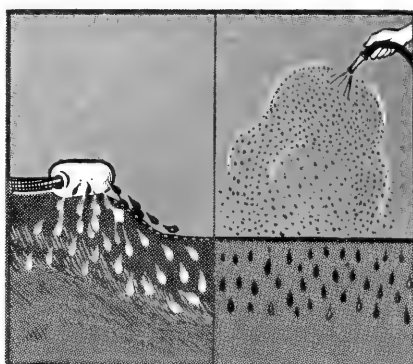
GOOD GRASS MUST BE FED

Established grass roots are notoriously heavy feeders. An early spring and late fall application of a balanced plant food plus a mid-summer stimulator will keep those grass roots busy delivering a healthy, lush, carpet of green. Apply uniformly at about 3 lbs per 100 square feet when the grass is dry. Brush the plant food off the blades with the back of a rake; then water thoroughly.



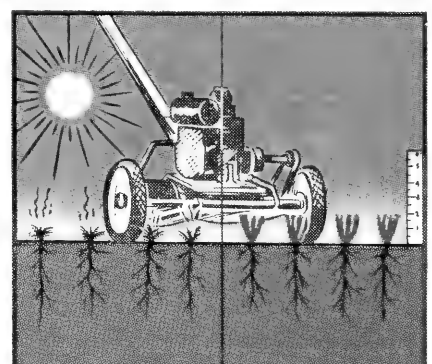
HOW MUCH, OR HOW MUCH WHAT?

In most cases, properly **blended** grass mixtures are best for year round growth. Lawn mixtures contain varied proportions of **expensive** and **inexpensive** seed. The cost of your lawn seed should be determined by the **known percentage** of these proportions not by the pound of mere "lawn seed." When you buy our lawn seed mixtures the blend is right and the price is right. Whether you are planning a new lawn or rebuilding, come in and talk it over.



TWO WATERING IDEAS

(Left) Watering slopes should be done by **soaking** from the top, this permits the crest to get an adequate water supply before it runs off to the bottom of the hill. (Right) Sprinkling newly seeded areas should be done with a misty spray not a stream, either by hand or with an efficient sprinkler, otherwise the seed will be displaced and gather in pools, thus ruining the even distribution of your sowing.



HOW LOW TO MOW

Mowing too close or "scalping," allows the hot summer sun to quickly "burn out" your lawn, destroying newly germinated grass which is left unprotected by shade and so weaken the plant structure that it cannot survive competition against weeds and insects. Mower cutting height should be about one and a half inches. Cut when growth reaches two and a half inches. Vary the route of your cutting.



Lawn Seed FOR EVERY NEED

FOR SUNNY SPOTS

Exposed areas in bright sun tend to "burn out." There is no one kind of seed that will take care of all situations the year round. But there is a best seed or blend for your sunny lawn and we know them. Let us help you plan and grow your lawn.

. . . OR SHADY LOTS

Ordinarily, establishing a good lawn in a shady area is a difficult situation. Absence of sufficient sunlight causes many types of lawn seed to quickly die out or even fail to germinate. Wherever this problem exists you need our Special Shade Mixture. These are excellent shade enduring grasses and clovers that have given good results on many shaded lawns here.

. . . OR SPECIAL NEEDS

Parks, playground, and golf courses need their own types of grass . . . all different. We have the right seed for all special uses. Just bring your problem to us . . . we'll furnish the seed you need and the know-how it takes to make it grow.

How Much Seed?

Skimpy seeding is costly in the long run. Plant enough to get a thick, heavy mat of grass and you'll need far less reseeding. The wise minimum for new lawn planting may be figured from this table:

Size of plot	Square feet	Amount of seed
10x20	200	1 lb.
20x50	1,000	5 lbs.
20x200	2,000	10 lbs.
50x100	5,000	25 lbs.
100x100	10,000	50 lbs.

For re-seeding, use at least half the amount.

The least expensive item in any lawn is the seed. Time, labor, fertilizer and care can all be wasted if the right seed is not used. Why waste time on doubtful unadapted seed from unknown sources which may contain grasses unsuited to this territory when the best is right here in our store?

In addition to the best in grass seed your lawn will need intelligent care in applying the right fertilizer at the proper time, in using the best weed controls to keep out undesirable growth, and in getting the best tools for cutting, raking, edging, watering and all other operations in maintaining your lawn. Our store is headquarters for all of the tools and supplies needed to make and maintain your lawn.

ASTORIA BENT

Produces numerous root stocks which spread underground and throw up new shoots, making a very thick turf. This Bent has a good color and is excellent for lawns and putting greens. Does not require as much cutting as Creeping Bent.

SEASIDE BENT

A true creeping Bent. The plant is dwarf, and multiplies rapidly by sending out runners in all directions. With proper watering and care, it makes a strong, enduring turf. If damaged it heals over promptly.

CHEWING FESCUE

A superb grass to grow in rather shaded areas and even on fairly acid soil and under other unfavorable conditions. Plants grow low, make a dense turf. Often used for putting greens and fairways.

RED TOP

Particularly suitable for wet, low spots, as it stands wet weather or even overflowing, better than other grasses. Also does well on almost any good, rich soil. Often thrives where Blue Grass fails—and therefore makes an excellent supplement for it.

OUR FINEST LAWN MIXTURE

Our Selected lawn mixture is a combination of the finest quality seeds—which we have developed after years of experience. All the grasses in it are fine-bladed and deep-rooting. There just isn't any better combination than this for the lawns of our territory!

KENTUCKY BLUE GRASS

Produces a deep dark green lawn of close thick turf. Maintains its green color until late in fall. Roots are deep, and plants are very hardy.

DOMESTIC RYE GRASS

A quick-growing annual, valuable in lawn mixtures as a nurse crop, to keep lawn green while better, slow-growing varieties are becoming established. Succeeds well on almost any soil.

PERENNIAL RYE GRASS

A quick growing grass, most suitable for mixtures. Succeeds on almost any soil not water sogged.

WHITE DUTCH CLOVER

Although not a grass. White Clover is very desirable in lawn mixtures because of its rapid, low growth and creeping stems. Valuable as a green cover for poor ground. Succeeds best on moist ground or during wet season.

OTHER GRASSES

Besides the lawn grasses listed here, we can also supply just about any other grasses you may need. We carry a complete line of all varieties that can be successfully grown in this part of the country. Just tell us what you want!

OUR SPECIAL SHADE MIXTURE

Our Shade lawn mixture is a scientifically developed blend of top quality shade enduring grasses and clovers. We've been getting excellent results with it for years and believe it will produce results anywhere that grass can be made to grow.

GEO. KELLER & SONS

909 Maine Street

QUINCY, ILLINOIS

Weeds In Your Lawn



HOW TO CARE FOR YOUR GARDEN TOOLS

A well kept tool makes any job easier and gives better results. **Dirty, rusty spades and hoes** don't slide into the soil or make clean cuts. It is also important to keep these and similar tools with a sharp cutting edge throughout the season. Any tool which comes in contact with the soil should be cleaned after each job, **since soil will adhere to a dull and rusty tool**. An oily rag may be run over the blades and handles and the metal parts rubbed dry with a rag.

Hang tools up, each in its place when not in use. Handles are roughened and edges dulled if tools are not placed in special racks. Brooms and brushes soon become crooked if allowed to rest on the bristles.

A great deal of damage is done to the garden hose by allowing water to stand in it, especially during the hot summer months. The most harmful treatment a hose can receive is to be left in the sun. When the water gets hot, the rubber rots and hardens on the outside, which shortens its usefulness.

All sprayers must be washed out with clean water after use, and the nozzle should be examined to get out any particles of grit which are bound to choke it.

If you use a rubber bulb syringe spray, examine it frequently for grit and keep it away from hot sun or steam pipes. In the spraying equipment, the leather washer in the pump needs frequent attention. Remove this washer, clean and oil it frequently. Examine all the attachments to the sprayer to be sure that they don't leak air.

The maxim for every gardener should be 'buy the best tools and always keep them clean and in the best condition.'

PRICES

subject to change

As is usual in seed catalogs, we must notify you that prices are subject to change without notice. We shall of course, make every effort to maintain our listed prices.

GARDEN SUPPLY PRICES NOT PREPAID

While prices quoted on garden seed include our shipping costs, this is not the case on our other lines. So, when ordering garden supply items by mail, please remember shipping costs are EXTRA.

CRABGRASS—Annual. Spread by seeds. Mow often at 1½ inches. Hand pick young seedlings. Feed lawn heavily in the fall.

BROAD LEAVED PLANTAIN—Perennial. Use hormone-type weed killer in late summer or drop acid or gasoline in centers of rosettes.

YELLOW FOXTAIL—Annual. Must be cultivated frequently. Use chemical weed killer.

DANDELION—Annual spread by seeds and from the crown. Cut below crowns any time of the year. Drop gasoline in crowns. Spray with hormone-type weed killer.

LAWN PENNYWORTH—Perennial. Seeds are distributed by lawnmower and rake. Must be dug out and ground reseeded or sodded.

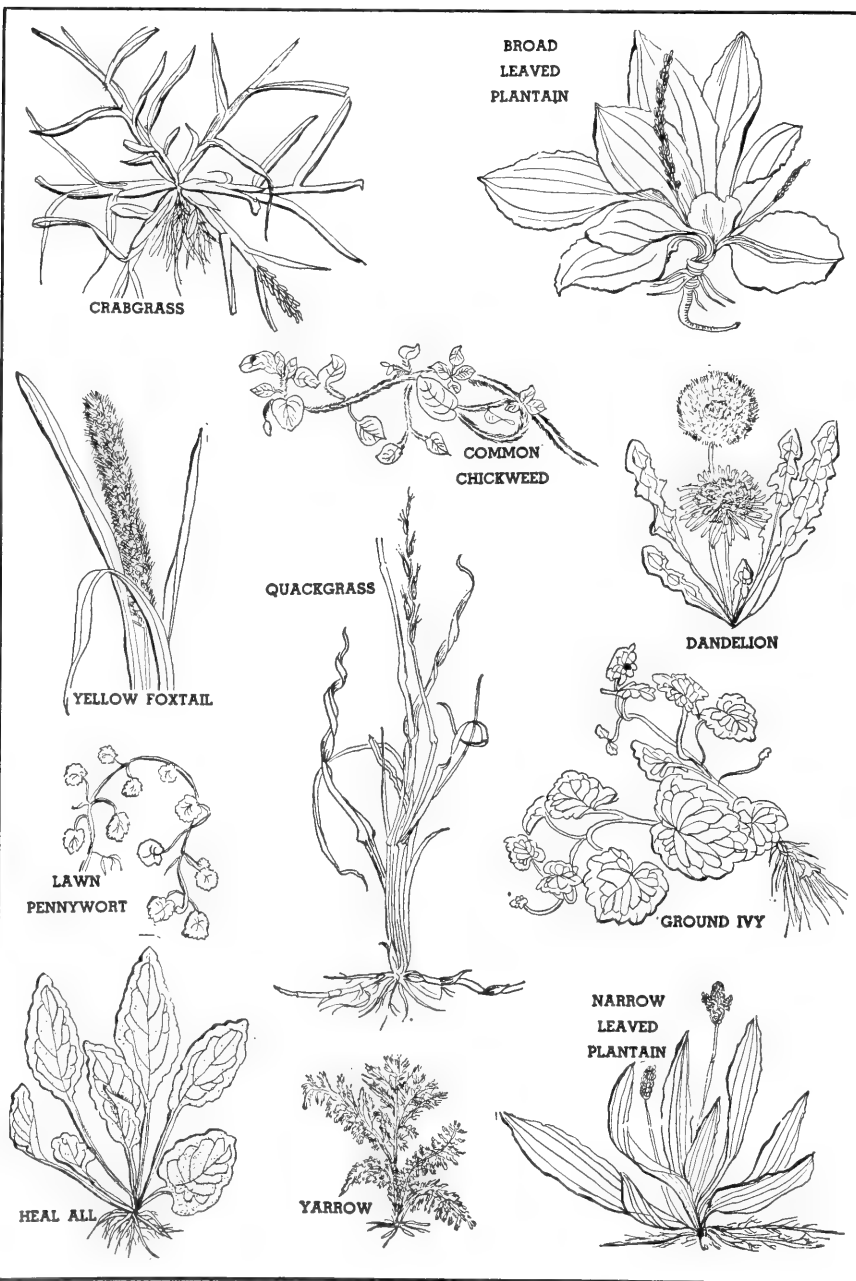
QUACK GRASS—Perennial. Spreads by creeping, jointed rootstalks. Smother with mulch or remove all visible shoots three times a week as long as they show.

GROUND IVY—Perennial. Dig out or spray with a sodium chlorate solution.

HEAL-ALL—Perennial, especially bad in shady lawns. Roots at nodes and spreads by seeds. Cut out by hand or spray with hormone-type weed killer after bluegrass is dormant.

YARROW—Perennial. Cut back repeatedly or dig out. Spray lawn with sulphate of iron.

NARROW LEAVED PLANTAIN—Perennial. Prolific seeder. Cut off tops, pierce a hole in the crown of the root and apply a few drops of carbolic acid or sodium chlorate.



A PORTRAIT GALLERY OF GARDEN ENEMIES SUCKING INSECTS



GLADIOLUS
THRIP, 1/16"



BEET LEAF
HOPPER, 1/8"



CHINCH BUG,
3/16"



TARNISHED
PLANT BUG, 1/4"



RED SPIDER
MITE, 1/60"



CABBAGE
APHID, 1/32"



SQUASH BUG,
5/8"

CHEWING INSECTS



ASPARAGUS
BEETLE, 7/32"



ROOT MAGGOT,
1/3"



CABBAGE
WORM, 1"



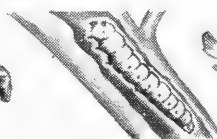
STRIPED CUCUMBER
BEETLE, 1/4"



SPOTTED CUCUMBER
BEETLE, 1/4"



CUT WORM,
3/4" - 1"



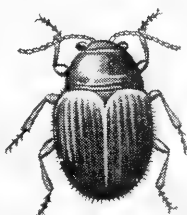
SQUASH VINE
BORER, 1/2"



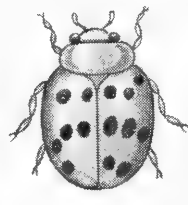
TOMATO HORN
WORM, 3" - 4"



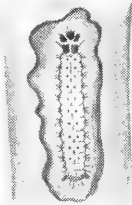
POTATO
BEETLE, 3/8"



FLEA BEETLE
1/16"



MEXICAN BEAN
BEETLE, 5/16"



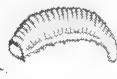
CORN BORER,
1"



CODLING MOTH,
1/2" - 3/4"



CABBAGE
LOOPER, 1 1/2"



CARROT
WEEVIL, 1/4"



CORN EAR
WORM, 1/4" - 1 1/2"

HERE'S WHAT THEY DO

APHID—Sucks. Colors and sizes varied. Found on under side of leaf and on stems. Soft-bodied, wingless—also with long, narrow transparent wings 3 times as long as its body. Causes discoloring or curling of leaves.

ASPARAGUS BEETLE—Gnaws shoots and feeds on foliage.

MEXICAN BEAN BEETLE—Chews. 8 black spots on each wing. Spiny larvae skeletonizes leaves.

CABBAGE WORM—Velvety green with yellow stripes. Chews holes in leaves.

CABBAGE LOOPER—Pale green with white stripes along sides. Chews.

COLORADO POTATO BEETLE—Lays yellowish orange eggs in groups of 20-30 on underside of leaves. 5 yellow and 5 black stripes on each wing. Chews.

CUCUMBER BEETLE—Yellow with 3 black stripes on back. Chews.

CUT WORM—Cuts off plants at soil level. Found within 8"-10" radius of plant, about an inch below ground surface. Dull colored, variably-striped. Curled up. Chews.

CARROT WEEVIL—Chews. Legless, brown headed grub. Tunnels into crown of plant, filled with a sawdust like material or sealed up with black exudate to hide eggs.

CODLING MOTH—Pinkish white, brown-headed worms eat holes from side or blossom end of apple to core.

CORN BORER—Chews. Found on under side of leaves. Flat masses of pearly white eggs, overlapping like scales and pinkish worms 1" long with dark heads.

CORN EAR WORM—Chews. Green to brownish, with white stripes along sides. Found in silk end of ear.

FLEA BEETLE—Chews. Shiny, black, round beetle. Chews sieve-like holes.

LEAF-HOPPER—Sucks. Found on under side of leaves. Pale green. Slender winged, wedge shaped. Gives leaf tips scorched appearance, puckering.

TOMATO HORN WORM—Chews. Large green worm with yellow markings and prominent horn-like projection at rear.

THRIPS—Sucks. Tiny yellow or brownish slender bodied, pointed at both ends. Narrow plume-like wings. Nymphs wingless, same size and shape, but watery white with bright red eyes.

ROOT MAGGOT—Chews. Causes pale yellowish green plants that wilt and die. Check dirt at roots for white legless worm or elongated white eggs.

RED SPIDER MITE—Sucks. Found at apple blossom time on under side of leaves. 8 legged, very tiny, reddish, whitish, greenish mite. Causes yellow or brown blotches on leaves with powdery appearance on under side.

SQUASH OR STINK BUG—Sucks. Egg clusters of reddish brown eggs on under side of leaves. Bug flat, brownish, stinking.

Bugs and Insects IN YOUR GARDEN

Ever since the first garden was planted, the fight between gardeners and insects has gone merrily along.

But now that fight is growing easier year by year. Just reasonably good strategy is all the gardener needs to win.

To make the job even easier, we present a highly valuable anti-bug weapon . . . a portrait gallery of the common garden enemies.

These unique pictures will help you identify the pests in your own garden, and once you know exactly which insect you are fighting, the job is easy. There's a proper insecticide for every one of them.

That's where our pictures are so extremely useful. When

you have these life-like portraits before you, identification is easier and more certain than ever.

Insects are spread over the season and in different stages of life from the egg, the larva to the bug itself. Their methods of attack vary in two ways, either chewers or suckers. The wide variety of harmful insects in their varied stages of life require in some cases vastly different chemicals to meet the immediate requirements.

To link up each bug with the insecticide that will handle him, just ask us. We keep very close watch on all new developments. We know exactly which of the new formulas have proved themselves . . . and what they can do. This practical knowledge is always at your service at our store.

Farm Seed

DEPENDABLE GRASSES AND GRAINS

Alfalfa—The No. 1 soil builder and restorer. We carry a full range of varieties, adapted to this territory.

Millet—An excellent food for stock and poultry. Also a good green fodder and hay plant. Chokes out weeds.

Rape, Dwarf Essex—Highly recommended for pasture for sheep, cattle and hogs. Makes splendid green feed for poultry. Plant early spring in moist soil.

Sorghums—An excellent soiling crop furnishing succulent feed for milch cows. A large yielding fodder crop. A good range of varieties.

Soy Beans—The crop of many purposes. Excellent for hay, ensilage, grain, and soil improvement. Ground soy beans are as good or better than Oil Meal for mixing with grains for dairy ration.

Vetch—A great producer for hay, pasturage or silage. Good cover crop and soil builder. Needs only moderate moisture, grows in almost any soil.

CLOVERS

Alsike—Very hardy. Does better on moist land than other varieties of Clover. Suitable for hay or pasture. Good bee plant.

Medium Red or June—The most valuable of the clover family. Makes two crops the second year. Does not exhaust the soil but enriches it.

Mammoth Red — Also called "Pea Vine" Clover. Grows large and coarse, often used for plowing under to enrich soil.

White Dutch—A very hardy creeping clover, adapts itself to great variety of soils and climates. Good pasture for sheep or cattle; fine for bees.

White Sweet (Biennial)—Excellent for pasture, hay and a soil improver. Drought-resistant.

GRASSES

Ky. Fescue — New all-purpose, all-location grass. Highest yielding grass for pasture-hay-silage. Grows on wet or dry, acid or alkali soil. Takes a year to establish but lasts 20 years or more.

Brome Grass—Drought defying, resistant to frost and extreme heat alike. Very early, and stays green late in fall. Produces abundant pasturage and enormous crops of high grade hay.

Kentucky Blue Grass—Excellent for pasture for all kinds of stock. Very hardy. Roots form tough sod. Requires two years to get well started, so often sown in mixtures with other grasses.

SEED CORN

Our selection of seed corn is built on an intimate knowledge of the kinds that do best in this locality. We have the best kinds for our particular soil and climate.

More and more, the problem of seed corn is becoming localized as new hybrids are released. It is important to have those hybrids best fitted to your growing conditions.

We have the right hybrids for you! Ask about our selection . . . especially adapted to this region.

**Ask for our latest
COMPLETE LIST
of varieties and prices
including many not listed
here.**

Orchard Grass — Hardy, quick-growing. Gives large yield of excellent hay. May be cut several times during season. Will grow in shady places.

Reed Canary Grass — Especially suited to swampy, over-flowed lands; but thrives on uplands where moisture is abundant. Makes splendid pasture, very early; lasts to late fall.

Red Top—Valuable for most soils. A good permanent grass. It should be grazed close. Grows successfully on alkali lands where other grasses fail.

Rye Grass, Domestic — Fast growing one-year grass. Yields abundantly and matures all in one season. Helpful as a nurse crop to other grasses.

Rye Grass, Perennial—A good pasture grass. Grows quickly and withstands drought reasonably well.

Sudan Grass—The ideal emergency hay and pasture crop for late planting. Never plant until ground is warm.

Timothy—Unsurpassed as a crop for hay. Relished by all kinds of stock, especially horses. Not suitable for permanent pasture. Should not be cut too early or pastured too late in fall.

SEED TREATMENT

More and more the coating of seed with stimulating bacteria is gaining favor with production-wise farmers. We highly recommend seed treatment for higher yields, faster germination and growth. Be sure to ask us about it the next time you stop in.

SEED POTATOES

Our certified stocks are the most economical you can plant. They reduce your hazards to a minimum and give you bigger production with fewer culls.

Field and Grass Seed Per Acre Hard Bushel Weight

	Lbs. per Bu.	Lbs. per Acre
Alfalfa	60	15 to 20
Barley	48	96
Brome Grass	14	15 to 20
Buckwheat	50	50
Clover, Alsike	60	8 to 10
Clover, Medium Red ..	60	10 to 12
Clover, Mammoth Red ..	60	8 to 12
Clover, Sweet	60	12 to 15
Clover, White	60	5 to 8
Cow Peas, broadcast ..	60	60 to 90
Flax, broadcast	56	25 to 30
Grass, Kentucky Blue ..	14	20 to 30
Grass, Orchard	14	22
Kaffir Corn, broadcast ..	56	40 to 50
Millet, for hay	50	50
Millet, for seed	50	30
Oats ..	32	64 to 96
Rape, broadcast	50	6 to 8
Reed's Canary Grass ..	32	4 to 6
Rye, broadcast	56	56 to 84
Sorghum, for fodder ..	50	50 to 60
Soy Beans, broadcast ..	60	30 to 45
Soy Beans, in drills ..	60	60 to 90
Sudan Grass, broadcast ..	40	20 to 25
Sudan, Grass, in drills ..	40	8 to 10
Timothy	45	10 to 12
Vetches, broadcast	60	50 to 60
Wheat	60	90

BULBS

and tubers



Gladiolus

BAGDAD—Smoky old rose, very fine for exhibition. Opens 6-to 8 immense blooms at a time. Very popular for the home garden.

BIT 'O HEAVEN—Orange with yellow throat. 9 to 12 medium blooms on tall spike.

BLUE BEAUTY—Light blue, edges of petals lined with violet blue.

BURMA—Deep reddish rose. Heavily ruffled blooms on a straight spike.

ELIZABETH THE QUEEN—Large mauve-ruffled flowers with dark lines in the throat.

FLORENCE NIGHTINGALE—Crystal clear white shading into a light cream throat. Opens up to 8 beautifully ruffled florets on a well balanced flowerhead.

GENERAL EISENHOWER—A brilliant Begonia pink shade. Extremely large blooms on a tall spike with a large number of them open.

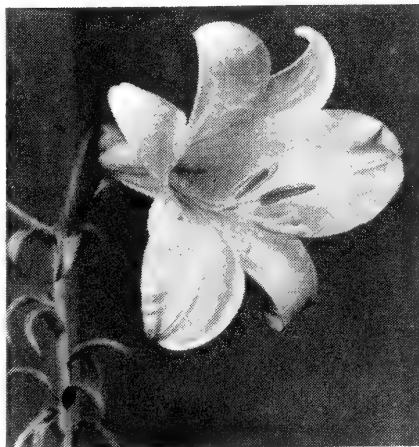
KING LEAR—Clear deep reddish purple with silver line on edge of petals.

LANTANA—Orange. Shading through orange-salmon with a golden throat.

LEADING LADY—Cream white. Very large florets on tall spikes.

MARGARET BEATON—Huge white florets, small vermillion blotch.

LILY, Regale



MISS WISCONSIN—Brilliant rose-pink. Opens to 8 large blooms.

PICARDY—Giant. Soft shrimp pink with a blotch of light flesh pink.

RED CHARM—Deep sparkling scarlet, deeper in the throat. 7 to 8 blooms.

ROSA VAN LIMA—Light rose pink. Excellent grower.

SNOW PRINCESS—New fine white of good size and form. Stems never crook.

SPIC and SPAN—Tall ruffled deep pink. Salmon shading.

SPOTLIGHT—Large. Clear deep yellow with small scarlet blotch in throat.

VALERIA—Bright scarlet. Opens 5-7 large nicely ruffled blooms at a time.

YELLOW HERALD—Amber yellow, carmine in the throat. The large wide open flowers are beautifully faced and spaced on a strong upright stem.

Cannas

KING HUMBERT—(Orchid-Flowering). Orange-scarlet with bright red markings.

PRESIDENT—Bright red clusters.

HUNGARIA—Large dainty rose-pink.

WINTZER'S COLOSSAL—Vivid scarlet.

Caladium

FANCY-LEAVED—Rich ornamental leaves marked, veined white, pink and red.

ELEPHANT'S EAR—Huge green leaves.

Tuberous Begonias

CAMELLIA-FLOWERED—Scarlet, pink, yellow, salmon, and white. Top size and top quality.

Lilies

Few flowers provide such regal beauty as lilies, and few are as hardy. Let us suggest the varieties that will thrive best in your garden.

Tuberoses

One of the most fragrant of all flowers. Tall spikes of white blooms.

Dahlias

(I.D.: Informal Decorative.
F.D.: Formal Decorative.)

A. D. LIVONI—(Show Type) Beautiful shade of deep pink, free flowering.

AVALON—(F. D.) A fine garden variety. Rich large lemon-yellow blooms.

COMMANDO—(F. D.) Clear shade of deep lavender. One of the finest.

GALLANT FOX—(F. D.) Brilliant dark red.

JANE COWL—(I. D.) Lovely buff and old gold shading to a salmon center.

JERSEY'S BEAUTY—(F. D.) Glorious clear pink. One of the finest ever produced.

ROYAL PENNANT—(I. D.) Royal purple, extra large.

MRS. I. DE VER WARNER—(F. D.) A beautiful orchid pink. Lovely large flowers.

MICHIGAN WHITE—(Semi-Cactus) Prolific blooming cutflower. Pure white.

MINIATURE DAHLIAS—Lovely 3 to 4 inch blossoms just like the large ones.

POMPON DAHLIAS—Charming "button" dahlias that require little care.

ROSY DAWN—(Ball type) Rose and yellow.

LILY, Calla



26

MOON PLANTING GUIDE

Phases and Positions of the Moon in 1954

For time immemorial many farmers and gardeners have timed their planting and weeding by the four phases of the moon and its passage through the belt of twelve constellations which comprise the zodiac. For the benefit of those who use this method to guide

their planting times we show here all the necessary information generally shown in more voluminous arrangements. We cannot vouch for the effectiveness of this method, but we are glad to provide these complete up-to-date tables for those who want them.

Signs of the Zodiac and Their Accepted Influences

♈ **ARIES:** Tends to dryness, barrenness. Fairly good for cultivating, spraying and weeding.

♉ **TAURUS:** Fairly productive. A good sign for planting root crops particularly potatoes and bulbous plants.

♊ **GEMINI:** Dry and barren. Not good for any kind of planting or transplanting. Kill noxious growths.

♋ **CANCER:** Moist, very fruitful, most productive of the Zodiac. Planting and transplanting should yield good crops. Irrigate, bud, graft, transplant.

♌ **LEO:** Most dry and barren sign. Use only to kill weeds, destroy roots, etc.

♍ **VIRGO:** Moist but barren. Not recommended for planting or transplanting; good for cultivating and destroying.

♎ **LIBRA:** Fairly fruitful. Seed for hay, corn, fodder, etc. Produces vigorous pulp growth, reasonable amount of grain. Good for flowers.

♏ **SCORPIO:** Next to Cancer in productiveness. Irrigate but do not dig potatoes.

♐ **SAGITTARIUS:** Generally considered barren but used by many for onions, seeding for hay, destroying weeds, etc.

♑ **CAPRICORN:** Earthly, fairly productive. Similar to Taurus but drier. Bulbous flowers, potatoes, tubers, root crops.

♒ **AQUARIUS:** Somewhat barren. Good only for cultivation and extermination of pests.

♓ **PISCES:** Similar to Cancer so use for same purposes. Very productive. Do not dig potatoes.

When to Plant

The tables at right show when the moon enters each sign of the Zodiac. It also shows the moon's changes.

Under each month, we show first the time at which the moon enters each SIGN (day of the month and hour of the day, **Central Standard Time**). Then we show the moon CHANGES (day and hour) for each month.

1st QUARTER, MOON INCREASING

—During 1st Quarter of Moon plant the following: Asparagus, Broccoli, Brussels Sprouts, Cabbage, Cauliflower, Celery, Corn, Cucumbers, Endive, Kohlrabi, Leeks, Lettuce, Spinach, Barley, Oats, Rye, Wheat.

2nd QUARTER, MOON INCREASING

—During 2nd Quarter of Moon plant the following: Beans, Egg Plant, Melons, Peas, Peppers, Pumpkins, Squash, Tomatoes, flowers, and cereals.

When possible, plant seed while the Moon is in the fruitful signs of Cancer

(♋), Scorpio (♏), or Pisces (♓). The next best signs are Taurus (♉), Libra (♎), and Capricorn (♑).

3rd QUARTER, MOON DECREASING

—During 3rd Quarter of Moon plant the following: Beets, Carrots, Chicory, Parsnips, Potatoes, Radishes, Rutabagas, Onions, Turnips, Tubers.

4th QUARTER, MOON DECREASING

—In 4th or Last Quarter of the Moon turn sod, pull weeds, and destroy noxious growths, especially when Moon is in barren signs, Gemini (♊), Leo (♌), Virgo (♍) or Aquarius (♒).

NOTE: All times shown below are Central Standard time.

JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE
1 ♀ .10:37a	2 ♀ .9:35a	1 ♀ .8:01p	2 ♀ .9:39a	1 ♀ .7:42p	2 ♀ .6:46a
3 ♀ .6:42p	4 ♀ .0:02a	3 ♀ .10:29p	4 ♀ .8:43a	3 ♀ .7:10p	4 ♀ .10:38a
6 ♀ .0:21a	6 ♀ .1:15p	5 ♀ .10:39p	6 ♀ .8:42a	5 ♀ .8:36p	6 ♀ .6:45p
8 ♀ .3:42a	8 ♀ .2:50p	7 ♀ .10:34p	8 ♀ .11:33a	8 ♀ .1:31a	9 ♀ .4:52a
10 ♀ .6:27a	10 ♀ .5:57p	10 ♀ .10:09a	10 ♀ .6:10p	10 ♀ .10:25a	11 ♀ .5:29p
12 ♀ .9:10a	12 ♀ .11:12p	12 ♀ .4:38a	13 ♀ .4:04a	12 ♀ .10:05p	14 ♀ .5:36a
14 ♀ .0:31p	15 ♀ .6:36a	14 ♀ .0:20p	15 ♀ .3:58p	15 ♀ .10:41a	16 ♀ .4:03p
16 ♀ .5:04p	17 ♀ .4:02p	17 ♀ .10:23a	18 ♀ .4:31a	17 ♀ .10:52p	19 ♀ .0:23a
18 ♀ .11:27p	20 ♀ .3:15a	19 ♀ .9:57a	20 ♀ .4:54a	20 ♀ .9:47a	21 ♀ .6:37a
21 ♀ .8:15a	22 ♀ .4:42p	21 ♀ .10:27p	23 ♀ .4:11a	22 ♀ .6:45p	23 ♀ .10:42a
23 ♀ .7:32p	25 ♀ .4:00a	24 ♀ .10:55a	25 ♀ .0:57p	25 ♀ .1:05a	25 ♀ .1:07p
26 ♀ .8:03a	27 ♀ .1:59p	26 ♀ .9:51p	27 ♀ .6:15p	27 ♀ .4:37a	27 ♀ .2:42p
28 ♀ .7:38p		29 ♀ .5:36a	29 ♀ .8:04p	29 ♀ .5:36a	29 ♀ .4:38p
31 ♀ .4:25a		31 ♀ .9:14a		31 ♀ .5:42a	
Changes	Changes	Changes	Changes	Changes	Changes
● 4 .8:21p	● 3 .9:55p	● 4 .9:11p	● 3 .6:24a	● 2 .2:22p	● 8 .3:13a
● 11 .6:21p	● 10 .2:29a	● 11 .11:51a	● 9 .11:05p	● 9 .0:17p	● 16 .6:05a
● 18 .8:36p	● 17 .1:17p	● 19 .6:42a	● 17 .11:48p	● 17 .3:46p	● 23 .1:45p
● 26 .9:28p	● 25 .5:28p	● 27 .10:13a	● 26 .10:57p	● 25 .7:48a	● 30 .6:25a
				● 31 .10:02p	
JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER
1 ♀ .8:20p	2 ♀ .9:16p	1 ♀ .4:49p	1 ♀ .0:40p	2 ♀ .6:17p	2 ♀ .8:37a
4 ♀ .2:58a	5 ♀ .9:02a	4 ♀ .5:32a	4 ♀ .1:01a	5 ♀ .1:30a	4 ♀ .1:30p
6 ♀ .0:55p	7 ♀ .9:31p	6 ♀ .5:06p	6 ♀ .10:41a	7 ♀ .3:01a	6 ♀ .3:19p
9 ♀ .1:04a	10 ♀ .8:18a	9 ♀ .1:27a	8 ♀ .4:10p	9 ♀ .4:47a	8 ♀ .3:16p
11 ♀ .1:16p	12 ♀ .3:49p	11 ♀ .5:55a	10 ♀ .5:54p	11 ♀ .3:51a	10 ♀ .3:09p
13 ♀ .11:36p	14 ♀ .8:13p	13 ♀ .7:22a	12 ♀ .5:32p	13 ♀ .4:01a	12 ♀ .4:53p
16 ♀ .7:19a	16 ♀ .10:36p	15 ♀ .7:42a	14 ♀ .5:13p	15 ♀ .7:04a	14 ♀ .9:58p
18 ♀ .0:31p	19 ♀ .0:27a	17 ♀ .8:57a	16 ♀ .6:55p	17 ♀ .1:56p	17 ♀ .6:51a
20 ♀ .6:05p	21 ♀ .2:57a	19 ♀ .0:15p	18 ♀ .11:44p	20 ♀ .0:04a	19 ♀ .6:44p
22 ♀ .6:52p	23 ♀ .6:50a	21 ♀ .6:06p	21 ♀ .7:46a	22 ♀ .0:13p	22 ♀ .7:35a
24 ♀ .9:31p	25 ♀ .11:27a	24 ♀ .2:12a	23 ♀ .6:14p	25 ♀ .1:00a	24 ♀ .7:28p
27 ♀ .0:42a	27 ♀ .7:46p	26 ♀ .0:12p	26 ♀ .10:51p	27 ♀ .1:22a	27 ♀ .Noon
29 ♀ .5:10a	30 ♀ .5:12a	28 ♀ .11:52p	28 ♀ .6:58p	30 ♀ .0:17a	29 ♀ .2:06p
31 ♀ .11:52a			31 ♀ .7:35p		
Changes	Changes	Changes	Changes	Changes	Changes
● 7 .7:33p	● 6 .0:50a	● 5 .6:28a	● 4 .11:30p	● 3 .2:54p	● 3 .3:55a
● 15 .6:28p	● 14 .5:02a	● 12 .2:19p	● 11 .11:09p	● 10 .8:28a	● 9 .6:56p
● 22 .6:13p	● 20 .10:50p	● 19 .5:10a	● 18 .2:29p	● 17 .3:32a	● 16 .8:21p
● 28 .4:19p	● 28 .4:20a	● 26 .6:50p	● 26 .11:46a	● 25 .6:30a	● 25 .2:32a



CABBAGE
Danish Ballhead
and Golden Acre

SQUASH
Early Prolific
Straightneck

THE VERY

On the following pages you will find the vegetable selections we have chosen from among the thousands of available varieties, as the finest for quality and yield for our own climatic and soil conditions.

Our nation has the finest food supply in the world, yet nutrition experts have proved that most of us are poorly nourished. As we all know our "three good square a day" often do not give us certain minerals and vitamins that we need. These necessary elements may be bought at the drug store, but they can also be home grown at far less cost. Garden fresh vegetables can provide nearly all of them in ample quantity.

Garden vegetables begin to undergo a profound change almost as soon as they're picked. In just a few short hours, inevitable natural processes alter

their flavor, their texture, their vitamin content. Anyone who has ever enjoyed sweet corn fresh from the garden knows what a tremendous difference these changes make.

Yes, nature offers rich rewards to the home gardener. So called "fresh" vegetables from the market just can't compare with the TRUE garden fresh kind.

For health, for taste, for savings, there's no substitute for garden fresh vegetables—they taste so much better and are so much better for you.

What You Should Know About Feeding Vegetables

By feeding their vegetables adequately, home gardeners can not only enjoy increased yields, and high quality, but can reduce substantially the work involved in gardening.

To apply, stretch the line to mark the row in which seeds are to be planted. Then not less than two

inches away on either side, make a furrow four inches deep. Pour plant food into each furrow at the rate of one pound (or pint) for 50 feet, and cover it with earth. Then make the drill in which seed are to be sown and proceed with planting as usual.

Give Your Garden A Head Start!

This year treat your family to earlier vegetables by starting your garden with our Selected Plants. These are big healthy, strong plants that will grow and thrive, and produce abundantly the vitamin-rich, healthful vegetables everyone craves and needs.

We can supply you with most every type of thriving vegetable plant ready to set out. They are all husky specimens . . . hardy and full of growth. This year have earlier and more vegetables by setting out plants.

GEO. KELLER & SONS

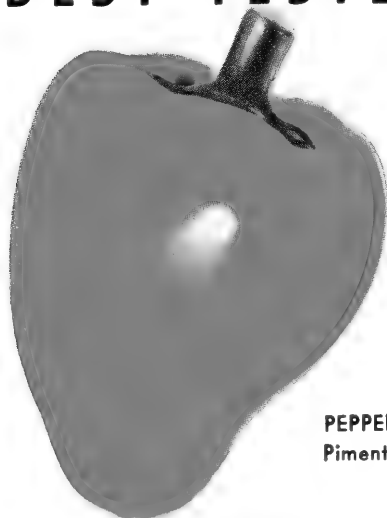
909 Maine Street

QUINCY, ILLINOIS

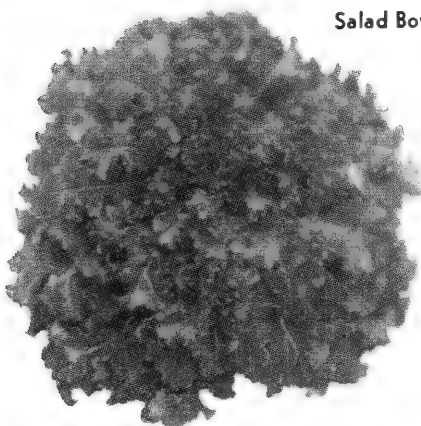
GEO. KELLER'S VEGETABLE

Seeds

BEST TESTED SEEDS

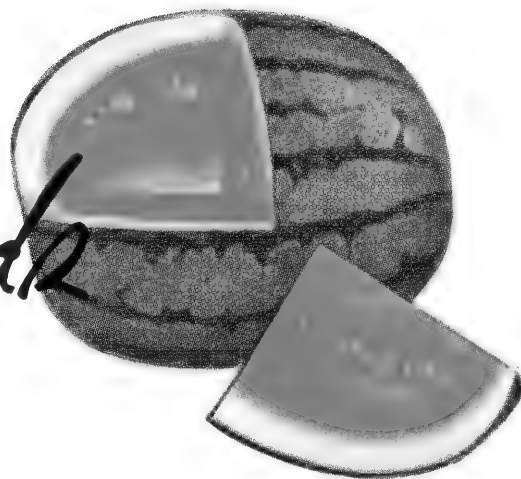


PEPPER
Pimento



LETTUCE
Salad Bowl

MUSKMELON,
Golden Delight



WATERMELON
Dixie Queen

From among all the thousands of available varieties, we have selected those which will produce the best quality and the greatest yields in the gardens of our territory. So we offer you this compact selection as a safe, sound base for your plants.

VEGETABLES FOR FREEZING

The Symbols (fr) following the variety names indicates vegetables suitable for home freezing.

- ALL AMERICA Vegetable garden.

ASPARAGUS

A hardy perennial; will bear over 20-year period if properly cared for. We recommend purchase of **ASPARAGUS ROOTS** rather than seeds, as roots produce crop 2 years earlier. If seed is used, sow thinly in drills in early Spring. Cover to 1/2" depth. Soak seed 24 hrs. before planting. Sow in loose, rich, moist soil after weather warms up. Thin to stand 6" apart. When a year old and in early spring transplant in well enriched beds in permanent position, 24" apart, in rows 20" apart. Set in hole so that crown is 8" below surface, but only cover tips with 3" of soil. As plants grow, fill in until level. Don't cut first year after setting.

MARY WASHINGTON (fr)—Thick, tall green spears with purple tops. Highly rust resistant. Rapid growing. Tender.

BEANS

Green Podded, Dwarf or Bush

BOUNTIFUL (fr)—An early, heavy-yielding variety. The leading flat podded bean for market and home use. Flat, light-green, stringless, but slightly fibrous pods of finest quality. 47 days. 15c.

GIANT STRINGLESS GREEN POD — 5 3/4" pods almost round. Meaty, stringless and brittle. Medium. Green. 53 days.

STRINGLESS GREEN POD (fr)—Large sturdy plants. Meaty round pods, brittle and strictly stringless. Medium green pods, oval, yellowish-brown seed. 54 days.

TENDERGREEN (fr)—Large, erect plants. Abundant, round, dark-green pods, strictly stringless and fleshy. 54 days to maturity.

TOPCROP—Does well in the home garden, market garden and is excellent for commercial processing. 5 1/2 to 6 inches long. Mosaic resistant. Round, medium light green pods. 51 days. Pkt. 25c.

WADE'S BUSH SNAP BEAN—Resistant to common bean mosaic and powdery mildew. Deep green pod, long, round, slender with reddish brown seed. 25c.

Wax Podded, Dwarf or Bush

PENCIL POD WAX (fr)—Rich yellow, deeply curved, round pods, 5 to 6 inches long. Always stringless, tender, brittle, fleshy, without fiber and of excellent quality. 54 days. 15c.

IMPROVED GOLDEN WAX (fr)—Small, erect, plants, moderately productive. Straight, thick, flat pods, creamy yellow and stringless. 51 days. 20c.

Beans, Pole

KENTUCKY WONDER (fr)—Strong climber, hardy, long-bearing. Curved, almost round pods, slightly stringy, but brittle and fibreless. Meaty. 65 days to maturity. 15c.

KENTUCKY WONDER WAX (fr)—Vigorous, good climbing plants waxy-yellow pods, flat and nearly stringless. Somewhat fibrous but meaty. 68 days. 15c.

McCASLAN—Dry shelled or snap, good climber. Medium green thick, flat pods. Meaty, stringless and tender. 65 days. 15c.

ALL VEGETABLE SEEDS

10c Per Packet

UNLESS OTHERWISE NOTED

Lima, Dwarf or Bush

BURPEE'S IMPROVED BUSH (fr)—Best of flat seeded bush limas. Pods contain four or five large beans of excellent quality. 75 days. 15c.

● **FORDHOOK BUSH 242 (fr)**—Straight pods large beans, excellent quality.

HENDERSON'S BUSH (fr)—Known as Baby Lima or Butter Bean. Plants small, early and bushy. 65 days. Very productive.

Lima, Pole

KING OF THE GARDEN (fr)—Flat, smooth pods with four or five white, large, flat beans. 88 days.

BEANS, SHELL

WHITE NAVY—Small seed, almost round and white. Hardy, prolific. Most popular for baking. 95 days.

RED KIDNEY—Pods 6-7 in long. Flat large beans, pinkish red to mahogany in color. Rich flavor. 95 days. 15c.

BEETS

Deep, rich sandy loam produces finest beets. As soon as ground can be worked sow in drills 18" apart and press soil firmly over seed. Each "seed" is a fruit with several true seeds. No matter how thinly beets are sown, they will need thinning. Make three sowings, one early, one three weeks later and one 60 days before fall. When tops are 3" to 6" tall pull them and use for cooked greens. Continue this until roots stand 6" apart.

CROSBY'S EGYPTIAN (fr)—Widely grown for early beets. Flattened globe shaped roots with small tap root. Excellent quality, tender and sweet. 60 days to maturity.

● **DETROIT PERFECTED (fr)**—Standard of excellence in table beets. Smooth, globular roots of deep oxblood red—sweet and tender. 68 days.

EARLY BLOOD TURNIP—Medium early. Tops medium, somewhat coarse. Bright red. 65 to 70 days.

EARLY WONDER—Early variety. Semi-globular, tender, blood-red. 58 days. 15c.

BEETS, STOCK (Mangel Wurzel)

Sow seeds in early fall and spring in rows. Plant 2½" to 4" apart. Later thin to 10" apart.

MAMMOTH LONG RED—Very popular, 30 to 50 tons per acre. Roots grow half above the ground. Light red, flesh white with rose tinge. 110 days. 15c.

BROCCOLI

Plant and cultivate like cabbage and cauliflower.

ITALIAN GREEN SPROUTING (fr)—Plant bears a succession of sprouting heads about 5-in. long, which, if kept cut, will be replaced by others 8 to 10 weeks. 55 to 65 days.

BRUSSELS SPROUTS

Easy to grow wherever conditions are favorable for late cabbage, and requires same culture. As sprouts begin to form remove lower leaves so that all nourishment sent to lower stem will be forced into the sprouts. Do not use until after heads have matured.

LONG ISLAND IMPROVED—Compact, uniform dwarf size plants. Cabbage-like sprouts 1¼" to 1½" in diameter. One of the most dependable varieties. Edible in 90 days.

CABBAGE

Sow seed in drills 6" apart across the bed, dropping the seed 5 to 6 to the inch. Firm soil after covering, then water thoroughly. Keep beds moist but not soaking wet. Seed germinates 3 to 8 days depending on temperature. Transplant to open ground when plants have made fourth pair of leaves. Space 12" x 24". Use plenty of good commercial fertilizer. Cultivate frequently, every 5 or 6 days until cabbages are large.

Yellows Resistant Varieties

MARION MARKET—Large, firm round heads, used for early kraut. A development from Copenhagen Market, 7-in., 4-lb. heads. 75 to 80 days. 15c.

WISCONSIN HOLLANDER—Late, excellent for winter storage and kraut. Similar to Hollander and Danish Ball Head. 7 to 8-in., 7 to 9-lb. heads. 100 to 110 days. 15c.

Standard Early Varieties

COPENHAGEN MARKET—Excellent, early short season type. Short stems, 6½ in., 3½ to 4-lb. heads. 65 to 70 days.

GOLDEN ACRE—Extra early variety producing uniform well-balanced head. Weighs about 3 lbs. Excellent quality. 65 days.

Late or Winter Varieties

● **CHIEFTAIN SAVOY**—Flattened globe-shaped. Crumpled leaves. Outstanding quality. 88 days to maturity.

● **PENN STATE BALLHEAD**—Special strain of Danish Ballhead. Heads almost globular. Excellent winter keeper. Recommended for kraut. Heavy producer. 15c.

Red Variety

MAMMOTH RED ROCK—Best of the red cabbages. Hard, round. Purplish-red heads. Good keeper, 6 to 8-in., 7 to 8 lb. heads. 100 days.

CHINESE CABBAGE

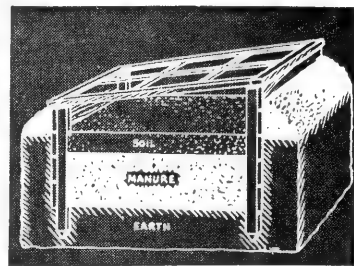
Must never be grown as a spring crop since it will only go to seed. Plant after June 15, as days are getting shorter, then it will head. An excellent succession crop to follow early peas.

CHIHILI—Dependable, early. Solid, tapered heads, 3 to 4-in. thick, 18 to 20-in. long. 75 days.

CARROTS

CHANTENAY, RED CORED (fr)—Root has thick shoulder and tapers to slight stump root, 5-in. long. Red cored. 70 days to maturity.

DANVERS HALF LONG—Sweet, tender roots, 6 to 7-in. long tapering to a blunt point. Fine for storing. 75 days.



Secrets of A Hot Bed

The hotbed should be located on the south side of a hedge, fence or building to break the wind, and must have at least six hours of direct sunshine during the day.

Standard hotbed sash is three feet wide and six feet long, so if sash is purchased, make hotbed of these dimensions. Frame should be sloped by making north side six to eight inches taller than south side to catch sunlight.

Dig hole six inches larger on all sides than the frame on which sash rests.

Pit should be 24" deep. Fill to top with fresh strawy horse manure and press down six inches. Set frame over manure and fill around outside and inside to level of ground. Add three inches of sifted soil inside frame. Heap leaves or straw around outside to conserve heat.

As soon as frame is in place, water well, insert thermometer in soil and cover with sash, airing daily until thermometer drops below 85 degrees. This is time to plant tomatoes and peppers. For cabbage, cauliflower, broccoli and kohlrabi, allow thermometer to go below 75°.

● **IMPROVED IMPERATOR (fr)**—Fine-grained, tender. Rich orange, indistinct core. Roots smooth, tapered to semi-blunt. 77 days.

NANTES IMPROVED CORELESS (fr)—Excellent for forcing. Tops small, roots bright orange, blunt ended. Flesh reddish orange and practically coreless. 70 days.

OXHEART OR GUERANDE—Excellent for shallow soil, easy to harvest. Chunky, tender and sweet. Bright orange. Keeps well. 72 to 75 days.

CAULIFLOWER

Needs rich soil and abundant watering. Cultivate same as cabbage but protect heads from sunlight to insure the prized white curd. This is done by gathering leaves together loosely as soon as heads begin forming, and tying them well at the top.

● **EARLY SNOWBALL (fr)**—Best and most widely used early variety. Medium, firm compact heads of fine flavor. 6-7 inches in diameter. 55 days. 25c.

PERENNIAL VEGETABLES IN THE GARDEN

Any home owner with a good sized back yard will do well to find room for at least three perennial vegetables.

ASPARAGUS may take up a good deal of garden room, but once established will keep on producing for twenty years.

It's best to buy dormant roots or crowns. Use 70 roots for 100 foot row. Dig a trench 12" wide and 12" deep. Put in a generous amount of manure or an all purpose plant food well mixed with the soil on the bottom of the trench. Add enough soil to bring the inside level of the trench to within 6 to 8 inches. **Keep soil moist.** As the spears begin to show, gradually add soil until you have reached the original soil level.

Don't cut for 2 seasons. The third year, cut the spears when they are 8" high and before their tips begin to unfold. Mulch in the fall and

soak beds. In the spring, cultivate and add a complete fertilizer, re-apply mulch and water thoroughly.

RHUBARB like asparagus is a permanent plant. It must be put in a part of the garden where it won't be disturbed. Once established it should not be moved. Ten or fifteen roots will be enough for a family.



Dig a trench about a foot wide and 2½ feet deep. Use a good all around fertilizer mixed thoroughly with the subsoil. Place rhubarb roots 4 to 5 feet apart in the trench and cover with 4 inches of subsoil. **Keep cultivated, both to conserve the moisture and to keep down weeds.**

In the fall, mulch with strawy manure or peat moss. Don't cut the first year, but from then on cut each spring.

ARTICHOKES—to prepare the bed, dig in plenty of manure or all round plant food. **Artichokes are heavy feeders and need large quantities of food right from the beginning.** While in active growth, give them plenty of water. A good place to plant artichokes is along the edge of the lawn. They will be well watered and the atmosphere will be cool and moist.

Buy sturdy young plants (suckers) and set 6 inches deep in the ground, leaving a shallow basin around each for water. Soak the soil well and mulch lightly. Plant rows four feet apart, with plants four feet apart.



The Cold Frame At Its Best

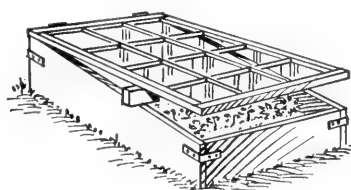
To get the full benefit from your cold frame, start it early and keep it busy every month of the year.

A cold frame is the same as a hot bed without manure or other source of artificial heat. It depends upon the sun for heat and must be covered with hot bed mats to conserve this heat at night and in coldest weather. Most important spring use for the frame is the hardening off of seedlings started indoors.

The cold frame is also used to start half-hardy and tender annuals sown three to four weeks ahead of the time they would be planted outdoors. Use your cold frame to store cuttings of herbaceous plants through the winter. It is an excellent place to establish division of clumps of alpine and perennials.

The cold frame is used for forcing early vegetables and hardy bulbs. In the fall, you can store your celery, cabbage, beets, carrots and turnips from your garden.

The bed in your cold frame should consist of a 2" layer of gravel for drainage, 1" sand, and 4"-5" of good garden loam. Sand under the soil makes transplanting easier. Always water in the early morning.



CELERIAC

LARGE SMOOTH PRAGUE—(Turnip rooted celery). Smooth spherical roots, 2 to 3-in. thick, 120 days, 15c.

CELERY

Start in shaded hotbed 60 days before needed. Cover seeds ¼". Transplant when 6" high. In setting outdoors, don't get soil in or over crown. Set 7" to 12" apart. Soil must be rich, moist and loose. As soon as plants have grown to 14" to 15" tall, set 12" boards on both sides of row and hold in place with earth. Or 4" drain tile can be used to blanch individual stalks. Celery must have warm, settled weather. If chilled, plants are likely to go to seed. Keep soil well fertilized and moist. Crop matures in cool weather of autumn.

GIANT PASCAL—Late variety for winter use. Large plant, dark green leaves. Big solid stalks that blanch to yellow white. 135 days, 15c.

GOLDEN SELF BLANCHING, DWARF—Compact plants, yellowish green foliage. Broad solid stalks, nutty flavor. Blanchers readily. 120 days, 15c.

WONDERFUL OR GOLDEN PLUME—Early, medium plant with compact, full heart. Blanchers easily to golden yellow. 112 to 115 days, 15c.

COLLARDS

Sow seed heavily and transplant when 4" high, or sow in rows in permanent beds and thin to 16" to 18" apart when plants are well started.

SOUTHERN OR GEORGIA—An excellent cooked green. Long stemmed plant, with clustered leaves. Withstands heat and bad soil. 24 to 36 days.

SWEET CORN Hybrids

We offer Hybrid Sweet Corn varieties known as the best for your garden—the finest that can be produced anywhere. We list here only a few of these choice kinds. Whatever your needs or your preference, be sure we can supply you with the kind of corn you want. Talk it over with us.

IOANA (fr)—Ears 7½ to 8-in., well-filled with 12 or 14 rows of deep, medium narrow, light yellow kernels. Highly resistant to drought and bacteria wilt. 87 days, 20c.

● **IOCHIEF**—A yellow hybrid sweet corn with sensational qualities. Sugar sweet and tender—stays prime longer—rich color. 20c.

GOLDEN CROSS BANTAM (fr)—Extremely uniform. Ears 10 to 14 rows, slightly lighter yellow than Golden Bantam. Highly resistant to Stewart's disease, 85 days, 20c.

MARCCROSS (fr)—An early wilt-resistant hybrid, producing deep golden yellow kernels 7 days earlier than Golden Bantam. Ears 6 to 7-in. long, with 12-14 rows of large sweet kernels, 73 days, 20c.

Open-Pollinated

BANTAM EVERGREEN—A cross of Golden Bantam on Stowell's Evergreen, 14 to 18 rows. Deep, rich golden kernels, tender, sweet. 90 days, 15c.

BLACK MEXICAN—Pure white corn with purplish-black seed, Ears are 7 to 8-in. long, 8 straight rows, 88 days, 15c.

COUNTRY GENTLEMAN OR SHOE PEG (fr)—Prolific late variety. Favored by canners. Irregular kernels, very deep, sweet. 93 days, 15c.

GOLDEN BANTAM (fr)—The best and most favorably known of all the yellow varieties. Stalks often have 2 ears. Ears 8 rowed, kernels broad, with tender hull, 15c.

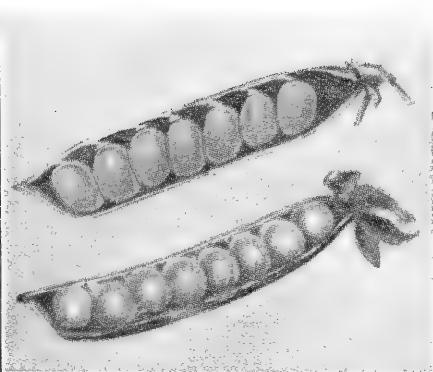
STOWELL'S EVERGREEN—White. Large ears about 8" long. Big kernels. Very sweet. Good late variety, 93 days, 15c.

POP CORN

SOUTH AMERICAN OR YELLOW DYNAMITE—Rich, creamy, yellow, smooth and round kernels, which pop double size of others. Ears 8 to 9-in. long. Vigorous grower, 115 days, 20c.

Hybrid Pop Corn

You will be delighted with hybrid pop corn. Yields are terrific; every plant produces corn with satisfying, big ears, with uniform popping. **ASK US ABOUT HYBRIDS!**



PEAS, Little Marvel, Thomas Laxton



SWEET CORN
Golden Bantam

CUCUMBER

Select soil fully exposed to sun and enriched thoroughly with fertilizer. Sandy soils with plenty of compost are best. Roots have difficulty on heavy soils. Plant 8 to 10 seeds in a "hill." Plant each hill about 36" apart. Cucumber vines like to stretch out, so plant rows about 4 feet apart. The old tale that melons or squash will cross pollinize with cucumbers and affect their taste if planted nearby is untrue. When vine is 6" long, thin to three strongest plants. Keep fruits picked to promote continuous fruiting. Use plenty of moisture; cucumbers are 90 per cent water.

A AND C—A long dark green cucumber which merits a trial. Uniform, nearly cylindrical, rounded at ends.

DAVIS PERFECT—Midseason. 9 to 10-in. long, tapered ends, good color. 68 days to maturity.

EARLY SURECROP HYBRID—Fruits slender, blunt ends, 8 to 9 inches long, 2½ in. in diameter, holds its dark green color well after picking. Flesh is crisp, white and unusually delicious. Small seed cavity. Resistant to mosaic and downy mildew.

LONG GREEN IMPROVED—Black spined, good pickling. Grows 10 to 15 in. long. 70 days to maturity.

EGGPLANT,
Black Beauty



● **MARKETER**—Fine new variety, very prolific. Attractive rich, dark green color, carried right down to blossom end. Crisp, icy-white flesh. 7¾-in. long 2¾, diameter.

NATIONAL PICKLING—Rich dark green. Straight and rather blunt at ends but not chunky. Best all-around pickler. Edible in 55 days.

STRAIGHT EIGHT—Unsurpassed as slicing cucumber. 2½-lb. fruits, rounded at ends, medium green. 68 days.

EGGPLANT

Requires continuous warm weather for best results. Seed should be started in a hot-bed, as it is slow to germinate. Set plants in open ground when 2" tall and protect from hot sun when young. Be sure to keep young plants developing rapidly. Cultivate freely. To produce large fruits, remove lateral branches so as to reduce number of fruits per plant. Spray to protect from potato bugs.

BLACK BEAUTY (fr)—Large, egg-shaped, smooth, very dark purple fruits. Keeps well. Plant bears 4 to 5 fruits. Early maturing. 15c.

NEW HAMPSHIRE HYBRID—Developed for short season areas. Round to olive shape fruits, growing low on the bush. 15c. days. 15c.

ENDIVE

Strictly a cool-weather crop: gets bitter at temperatures much above 80 degrees. Even moderately warm weather causes the plants to produce seed stalks. Plant very early. For late fall, sow early in middle autumn. Use last planting as late fall salad crop, and store surplus in cold frame or cellar by digging each plant with ball of soil. Plant in shallow drills with rows spaced 18" apart. When 4 inches tall, thin out to stand 6 inches to a foot apart. To blanch gather the outer leaves together and tie with soft twine or raffia. Do this when plant is nearly grown. Strings should be untied after a rain to permit leaves to dry and avoid rotting.

FULL HEART OR ESCAROLE—A strongly bunched mass of thick, slightly crumpled leaves, well blanched heart. Upright growing plant about 12 inches in diameter. 71 days.

GREEN CURLED RUFFEC—Plants 16 to 18-in. in diameter. Fine fall variety. White, tender, fleshy. 95 days. 15c.

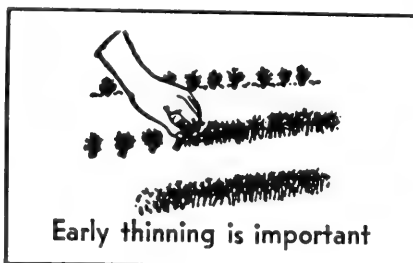
HERBS

(AROMATIC, MEDICINAL AND KITCHEN)

ANISE—An annual—used for garnishing, seasoning and for cordials. Seeds have an aromatic flavor. Plants 14". 75 days. 25c.

BASIL—SWEET—Annual; Ht. 12" to 18". Leaves, green or dried, are chiefly used as a seasoning for soups, stews, etc. 85 days. 20c.

BORAGE—Annual; Ht. 12-18". Young tender leaves are used as salad and also used to flavor lemonade and other cooling drinks. 80 days. 20c.



Early thinning is important



ONIONS, Sweet Spanish (left), Globe Danvers

CARAWAY — Biennial; Ht. 18-24". Seeds used for flavoring. Young leaves and shoots used for flavoring salads. 70 days. 15c.

CORIANDER — Annual; Ht. 24-30". Seeds used for flavoring and in candy and to mask taste of medicine. 75 days. 15c.

CHIVES—Perennial; Ht. 6". Tops, finely chopped for adding mild onion flavor to soups, stews, salads, etc. 80 days. 20c.

DILL—Annual; 2' to 3'. Seeds and leaves used for flavoring—especially for dill pickles. 70 days.

FENNEL, SWEET — Biennial; Ht. 2' to 4'. Leaves are used for garnishing, fresh stems tender, eaten raw like celery or in salads. Seeds used for flavoring. 60 days to mature. 15c.

MARGORAM, SWEET — Annual; Ht. 1' to 2'. Used for seasoning either fresh or dried. 70 days. 20c.

ROSEMARY—Perennial used as annual; 2' to 4'. Fragrant odor and warm, pungent taste, acceptable seasoning. 20c.

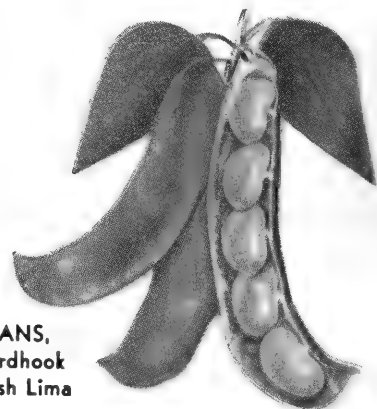
SAGE—Perennial; Ht. 14" to 16". Used for seasoning either fresh or dried.

THYME — Perennial; Ht. 8" to 12". Aromatic foliage used as seasoning. 85 days. 25c.

KALE OR BORECOLE

Early fall or spring sowing. Either in rows or broadcast. To produce large plants have rows 2' apart and thin to 2'in rows. Leaves are best after coming of cool weather in fall.

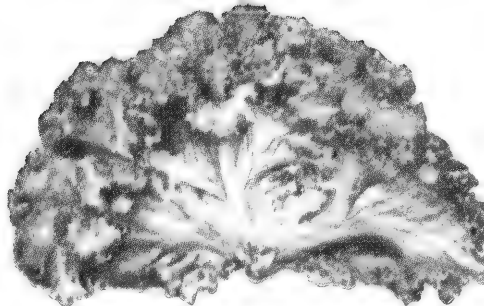
DWARF BLUE CURLED SCOTCH — Wide spreading, fine curled blue-green plant plume-like leaves. Used as a vegetable and for ornament. Exceptionally uniform. 55 days.



BEANS,
Fordhook
Bush Lima



MUSKMELON, Hale's Best



LETTUCE, Early Curled Simpson

GRAND RAPIDS—Erect, compact plants. Light green, broad heavily fringed. For forcing or early planting, 43 days.

OAK LEAF—A popular leaf lettuce for home gardens. Rich, dark green leaves, tender and delicious. Fine resistance to hot weather. Per packet—15c.

PRIZEHEAD—Early non-heading sort. Medium sized plants, crisp and tender. Color light brown on a medium green base. Leaves frilled at edges, and crumpled, 47 days.

● **SALAD BOWL**—Delicious bowl-full of rich green and decorative leaf lettuce. 25c.

KOHLRABI

Sow seed in early spring or fall and when well established thin to 6" apart in the row. Even better to start it in beds and transplant same as cabbage. Planting at intervals of 10 days gives tender bulbs until hot weather. Must be used when young. Woody when old.

WHITE VIENNA EARLY (fr)—8 to 10-in. leaves on slender stems. Bulbs 2 to 3-in., globular light green. Crisp, tender, clear white flesh. 55 to 60 days. 15c.

LEEK

LARGE AMERICAN FLAG—An early, popular variety, with thick, long white stems, leaves large and drooping, medium green. 130 days. 15c.

LETTUCE

Keep lettuce growing rapidly for best results. A light, rich soil needed for this. Earliest varieties must be started from seed in cold-frame. As soon as open ground can be worked, transplant. For later use, sow seed in open ground as soon as weather is favorable. Thin plants in rows 4" to 8" depending on variety.

Remember that lettuce is a fast-growing, rich feeding crop. Give it plenty of water. And use your compost or well-rooted manure liberally on the lettuce row. A light sprinkling of nitrate of soda will pay, too, because lettuce thrives on lots of nitrogen.

Heading or Cabbage

BIBB—Early, small headed lettuce of excellent quality and flavor. Perfect for home

gardens. Very smooth, dark green leaves, bleaching to yellow. 15c.

BIG BOSTON OR MAMMOTH BOSTON — Popular for cold frame forcing and outside culture. Medium, compact, heads with creamy yellow heart. Smooth, glossy leaves, edges wavy, and slightly tinged with reddish brown. 75 days. 15c.

● **GREAT LAKES**—An outstanding Iceberg or Crisp-head type. A summer lettuce that stands heat well and is very resistant to tip burn. Heads medium, solid. 15c.

ICEBERG—Late, large variety. Compact heads, crumpled, crisp and sweet. Leaves light green, slightly brown on edges. 85 days.

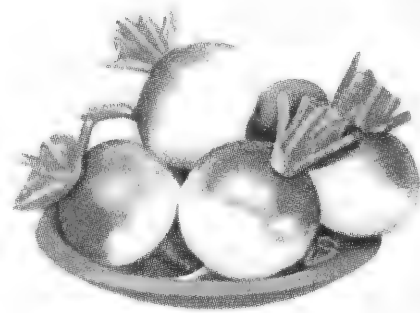
IMPERIAL NO. 847 (FLORIDA ICEBERG)—Heads are of good size and solid. Does well in hot weather, and resistant to tip burn. Hardy. 83 days. 15c.

NEW YORK NO. 12—The standard crisp-head lettuce. Large globular shaped head, dark green with blanching, silvery white heart. Successfully grown outdoors spring, summer and fall. Edible in 85 days. 15c.

WHITE PARIS COS OR TRIANON—Medium large self-folding dark green leaf shaped heads. Greenish-white, well blanched interior. 66 days.

Loose Leaf Varieties

BLACK SEEDED SIMPSON — Light green, frilled and crumpled. 45 days.



TURNIP, Purple Top White Globe

MELONS

MUSKMELON AND CANTALOUPE

Easily injured by cool weather. Before planting, spade liberal forkful of well rotted manure into each hill. Plant 8 to 10 seeds to a hill. Thin plants to four per hill after third leaf develops, and train vines in different directions. On moist ground, use shingles to hold melons off ground to prevent rotting. If grown in cool weather or where nights are cold, will not bear well and melons will have poor flavor.

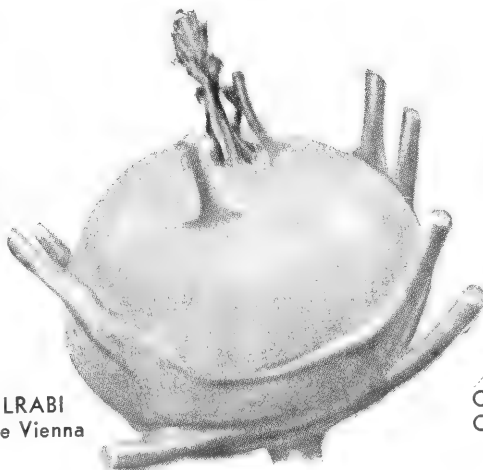
BENDER'S SURPRISE—Coarse netted 7-lb., oblong fruit, distinctly ribbed hard greenish-yellow skin. Flesh bright salmon. 95 days to maturity. 15c.

GOLDEN DELIGHT — Delicious orange or salmon flesh. Fruits elongated and firmer than most of its class. 15c.

(Continued on page 34)



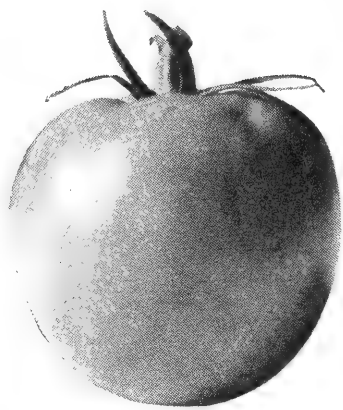
BEETS, Detroit Dark Red



KOHLRABI
White Vienna



CARROTS,
Chantenay



TOMATO, Rutgers

Tomatoes

Tomatoes are one of the most important vegetable crops and should be grown in all vegetable gardens regardless of size.

There are just a few pointers to remember to have a good crop.

Set out plants a week after the average date of the last killing frost. However, if Hotkaps or similar protection is provided, they may be set out a little earlier. Don't set plants during cold, wet weather.

Don't plant too close together, and be sure to plant them deeply.

Use the proper fertilizer to produce maximum yields.

Mulching your tomatoes conserves soil moisture and does much to prevent blossom end rot.

Although unstaked tomatoes produce more fruit, it's probably best for the home gardener to conserve space by staking. When staked, be sure and keep all the side branches pinched off and limit to one or two stems. Tie each plant to a 6 foot stake and set plant 2½ feet apart each way.

MELONS, continued

HALE'S BEST—Flesh thick, deep salmon-pink, sweet and tasty. Heavily netted rind, with faint stripe. Small seed cavity. Outstanding variety, resistant to powdery mildew, 4 lbs, 86 days. 15c.

HEARTS OF GOLD OR IMPROVED HOODOO—Nearly round 2-lb. fruit, distinctly ribbed, deep green with fine grey netting. Thick, salmon flesh, tender sweet, 94 days. 15c.

● **HONEY ROCK OR SUGAR ROCK**—Round, 4-lb. fruit. Gray-green skin, coarse, sparse netting. Orange-salmon, thick flesh, fine flavor. 85 days. 15c.

PRIDE OF WISCONSIN—Small seed cavity and thick, orange flesh, excellent flavor. Matures early. Large size. A new melon which is deservedly becoming a leader. 92 days. 15c.

ROCKY FORD—Fruits small with rather large red cavities. Nearly round. 2½ lbs. No ribs. Flesh thick and green with golden tinge at center. Very juicy and spicy. Excellent quality. 92 days to maturity.

WATERMELON

Requires about same culture as muskmelon, except the vines need more room. Fertilizer each hill liberally and cultivate thoroughly.

● **CONGO**—Oblong, blocky dark green fruits faintly striped lighter. Especially adapted to the South. Resistant to Anthracnose. 90 days.

DIXIE QUEEN—Very prolific. Bright-red, crisp, splendid quality fibreglass flesh.

KLECKLEY'S SWEET OR WONDERMELON—Large, cylindrical, dark bluish-green, with thin, tender rind. Bright red, juicy, sweet flesh, creamy-white seeds with traces of brown. 85 days.

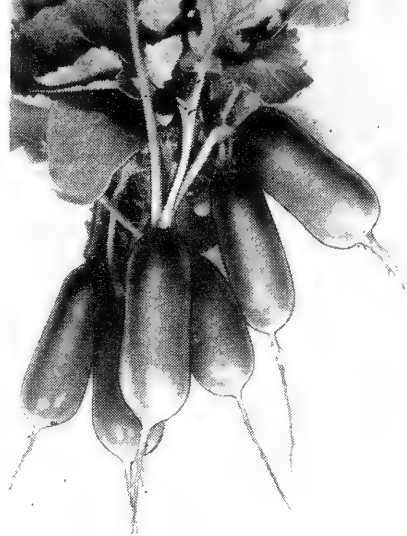
● **NEW HAMPSHIRE MIDGET**—Icebox size, very good flavored strawberry red flesh. The best midget so far produced and recommended where standard or large sized watermelons do not mature satisfactorily. 78 days. 15c.

STONE MOUNTAIN—Also called Dixie Belle. High quality shipping variety. Fruits very large, oval-round, blunt ends. Dark green, tough rind. Flesh rich, scarlet, fine grained, sweet. Seed white with black tips. 90 days.

TOM WATSON—Red heart strain. Large fruit, uniform cylindrical.

MUSTARD

Sow as early as possible in the spring. Keep rows 6" to 12" apart and cover with soil ½" deep. You may also sow seed in autumn to raise greens.



RADISH, French Breakfast

FORDHOOK FANCY—Upright growing, mild variety. Bright green leaves, plume-like and deeply fringed on the edges. 50 days. 15c.

● **SOUTHERN GIANT CURLED**—Large, frilled and crumpled. Light green leaves. 35 days to maturity.

TENDERGREEN—Wholesome, quick growing green, combining mustard and spinach flavors. 28 days.

OKRA OR GUMBO

Sow in rows about 3" apart. Cover seeds with about 1" of fine soil firmly pressed down. Thin plants 18" to 24" apart when they reach 3" growth. Do not plant until ground is warm, as this is a tender, hot weather plant. Pick before woody fibres develop.

● **CLEMSON SPINELESS**—Pods are rich green, straight, uniform ridged and of best quality. 56 days.

DWARF GREEN—Early, prolific dwarf growing sort. Dark green fluted, 5 to 7-in. pointed pods. Most desirable, compact growing okra. 50 days.

PERKIN'S MAMMOTH LONG POD—Early and prolific. Very tender, long pods. Deep green and slightly corrugated. 68 days.

Bush, Pole and Lima Beans

Beans are the most adaptable crop we have. You can always squeeze in a crop if you have sixty days of growing weather before frost. The plants can be kept producing over a long period if you pick them clean.

BUSH BEANS

Don't plant until the weather is warm and settled. Sow beans in bottom of furrow 3 to 4 inches deep and from 2½ to 3½ feet between rows, 2 to 3 inches apart in rows. Plant a 10 to 20 foot row every two weeks until August 10. Keep cultivated until plants blossom.

DO NOT CULTIVATE when blossoms are in prime or when plants are wet with dew.

POLE BEANS

In warm ground set poles 4 to 8 feet long slanting a bit to the north in rows 4 feet apart.

Anchor well as heavy bean vines blow over easily.

Plant 5 to 8 beans about 1 inch deep around each pole. When growth is sufficient, thin to four plants.

Sometimes three poles set to form a tepee are used and several beans planted around each tepee.

LIMA BEANS

Plant in warm, dry ground. Make rows 2' apart and drop beans 3 inches apart in row. Plant lima beans with the eye down to assist quick germination.



ONIONS

Plant as soon as soil can be prepared. For best yield, plant on very fertile land—fall plowed, and thoroughly fertilized. When plants are a few inches tall, thin to prevent crowding—using the plants removed as green onions. Leave 4" apart for globe-types and 6" for the big Spanish types to mature for dry onions. Latter can also be started indoors for largest bulbs and can be set out 6" apart after frost danger has passed. All onions need liberal feeding and watering. Those left to become fully ripe can be stored for winter. Cultivate and hand weed every two weeks in summer.

Yellow Varieties

● **YELLOW SWEET SPANISH**—Large, globe-shaped, exceptionally mild and sweet—excellent for eating raw or boiled. Light yellow skin and pure white, firm, crisp, and tasty flesh. 112 days. 15c.

YELLOW GLOBE EARLY—An oval shaped straw-colored onion. White flesh, crisp and mild. Splendid keeper. Matures in 110 days. 15c.

White Varieties

SOUTHPORT WHITE GLOBE—Best of the whites. Medium-sized, round, solid white bulbs, fine thin skin. Waxy white flesh, mild and fine grained. Keeps well in fall. 110 to 112 days. 15c.

WHITE BUNCHING—A good Spring appetizer. Crisp and mild. Fine for cooking when grown larger. 60 days. 15c.

WHITE PORTUGAL OR SILVERSKIN—Excellent flat variety. Dependable cropper, excellent for sets, for green bunching, or as a pickler. 100 to 102 days. 15c.

Red Varieties

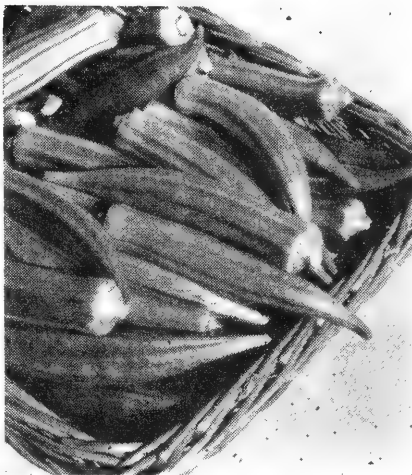
SOUTHPORT RED GLOBE—Finest of all red onions. Perfectly round, good sized bulbs with thick, small necks. Skin is deep purplish-red. Strong flavored flesh, white tinged with pink. Good keeper, productive. 112-114 days to maturity. 15c.

ONION PLANTS

Sturdy, hardy plants that come to you all ready to set out. Ask for prices.

ONION SETS

Onion sets used instead of seeds will produce earlier crops of green onions or large bulbs. Plant set right side up and cover with garden rake; then firm the soil well over the sets.



OKRA, Perkins Mammoth

PARSLEY

Does best in rich, mellow loam. Seed is slow to germinate, and is helped by soaking in warm water overnight before planting. Sow early and not too deeply. Space plants 6" apart. When curled varieties are about 3" tall, cut off leaves. The new growth will be brighter and curlier.

MOSS CURLED OR TRIPLE CURLED—Compact, dark green leaves, curled and fine-cut. 70 days.

● **PARAMOUNT**—The best looking, finest and most uniformly curled. Dark green leaves, tall strong stems. 15c.

PARSNIP

Needs rich, mellow soil for best growth. Must be planted as early as ground can be worked. Soil must be loose to a depth of 12" and cannot be heavy. Rows should be 15" to 18" apart. Cover seed 1/2" and press down soil. Thin out to 4" when plants have made a good start. Cold weather turns starches into sugar and improves flavor. Roots are hardy: leave in ground over winter if desired.

HOLLOW CROWN (fr)—The most generally grown kind. Roots 2 1/2 to 3-in. thick at shoulder. 12 to 14-in. long, uniformly tapered, hollow crowned. Edible in 95 days.

PEAS

Early peas need a light, warm soil; but general crop thrives best in moderately heavy soil. (Avoid fresh manure and very rich or wet, mucky soil as this produces large growth of vine at the cost of quality of the peas.) Plant seed in rows at 2" depth. Keep rows 21" to 28" apart for dwarf varieties and 28" to 42" for the taller types. Gather crop as fast as it is fit to use or new pods will cease to form and those partly advanced will cease growth.

Plant variety Alaska as soon as ground can be dug. Plant wrinkled varieties (which have better flavor) when narcissus buds show color or when crocuses are in bloom. Peas are not satisfactory when weather turns hot. Tall varieties must be staked. Most home gardeners prefer dwarf varieties like Little Marvel. Peas want well-limed soil. Don't forget, inoculation improves production.

Early and Second Variety

ALASKA—Wilt resistant. Used for canning and early home garden. Blunt, straight light-green. 3-in. pods. Plants 32-in. 69 days. 20c.

● **FREEZONIAN (fr)**—Luscious, melting peas that retain their garden fresh sweet flavor after freezing. 3 1/2 inch pods packed with 8 or 9 medium sized peas. 63 days. 15c.

LAXTON'S PROGRESS (fr)—Medium dark green vine, 16 to 18-in. Single pods almost an inch wide and 4 1/2 to 5-in. long, with 7 to 9 large peas. 62 days. 15c.

LITTLE MARVEL (fr)—Outstanding, dwarf. Fine quality, large yield. Single and double, dark green, 3-in. pods—blunt, plump, well filled with 7 to 8 medium sized, light green tender peas. Edible in 62 days. 15c.

THOMAS LAXTON (fr)—Medium height. Strong vine bears numerous dark green, blunt ended pods, 4 to 4 1/2-in. Retains flavor and sweetness. One of earliest. 57 days.

Later Varieties

ALDERMAN OR DARK-PODDED TELEPHONE (fr)—Large podded variety of the Telephone family. Excellent for home gardens, truckers, shipping to distant markets and for freezing; resistant to Fusarium wilt. Vine dark green, coarse. Pods single, very broad, plump, straight, dark green, pointed; contains 8 to 10 peas of highest quality. Seed large, wrinkled, light green. 74 days. 20c.

Beets, Carrots and Turnips

Beets are easy to grow and they are uninjured by light frosts. Sow seeds 1/2 inch deep at two-week intervals from early spring until early August. Thin to 3 inches between seedlings. Try cooking the seedlings like Spinach for a different taste treat.

Carrots—sow the seed thickly as early as the ground can be worked in drills about 1/2 to 3/4 inches deep in rows 1 to 2 feet apart. Thin to 2 1/2 inches apart. The finger size thinnings are delicious for eating fresh.

Turnips—sow as soon as the ground is ready in the spring 1/2 inch deep. Thin to 3 inches from plant to plant. Sow again for winter use in late summer.

Hot weather and slow growing cause turnips to become woody and bitter. Water regularly during the dry weather.

Heavy clay soil, because of the density, resists the downward growth of long, slender rooted vegetables. Sand added to heavy soil will assist in relieving the density but it must be accompanied by peat moss, Terra Lite or one of the new soil conditioners.

Lettuce, Chard and Cabbage

The fact that leaf lettuce will tolerate summer heat makes it the big lettuce crop for the home gardener. If the leaves are cut instead of pulled, leaving a one inch stump, the plant will produce another crop, taking it well into the summer. A 25 foot row will produce all that a family of four can eat.

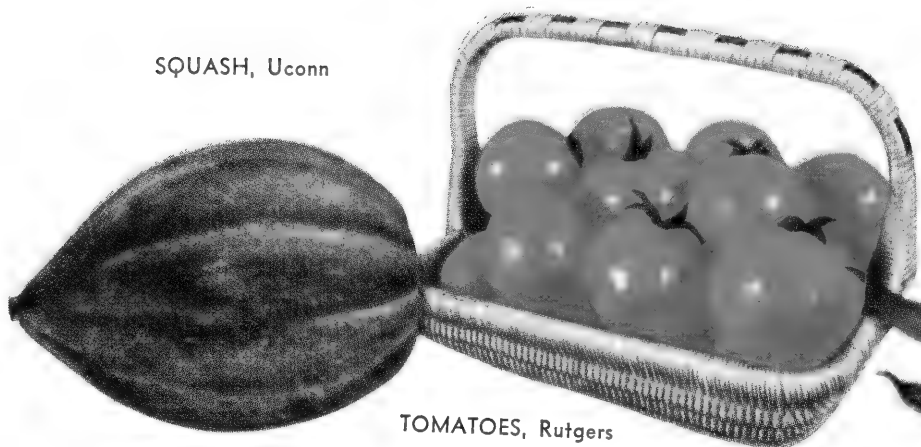
Head lettuce must be started in the hot bed and transplanted when the plants have made 2 or 3 true leaves. Cool moist weather is best for growing head lettuce and watering is necessary.

Chard is a delectable vegetable which in most cases must be grown at home, for you seldom see it on the market. Sow early in the spring and thin to 9 inches apart. Chard is among the most healthful of vegetables as it is high in Vitamins A and G and in all minerals, especially iron.

Cabbage has often been called our No. 1 green because of its durability and fine eating qualities.

For early cabbage, sow in hot beds and transplant when 3 to 4 inches high. Late cabbage is started in flats or boxes outdoors, then transplanted to the garden. Be sure and cultivate frequently to keep down weeds and conserve soil moisture.

SQUASH, Uconn



BEANS, Topcrop

TOMATOES, Rutgers

HUNDREDFOLD OR LAXTONIAN—Exceptionally choice and prolific. Dark green. Rather coarse vines. Straight pointed, well-filled $2\frac{1}{2}$ " pods. 62 days.

Edible Podded or Sugar

MAMMOTH MELTING SUGAR—Wilt resistant. Coarse light-green vine, 54-in. Single $4\frac{1}{2}$ -in. pods, broad, indented light, blunt, stringless, without fiber, fleshy. Contains 7 peas. Seed large, round, creamy-white. 74 days. 15c.

PEPPERS

Need long growing season: start indoors 8 weeks before plants are wanted. Set plants 15" x 24" and feed liberally for bigger fruits.

Warm, mellow soil in sheltered location is best. Cultivate regularly, drawing soil up around stems. When plants are 7" to 8" tall, hoe in light dressing of commercial fertilizer. Do not plant hot peppers near sweet; they are apt to cross.

Sweet

CALIFORNIA WONDER IMPROVED—Number one quality peppers, about 4-in. long and $3\frac{1}{2}$ -in. diameter, very smooth, 3 and 4 lobed, glossy green, turning bright crimson when ripe. Remarkable thick walls, tender, sweet. 75 days to maturity. 15c.

PIMENTO OR PERFECTION—Best of the medium sized sweet peppers. Excellent for stuffing. Smooth, heart-shaped, about 3-in. long. 125 days. 15c.

RUBY KING—Bred for size and uniformity. Dark green turning to bright deep red fruit. Thick flesh sweet and mild. 60 days. 15c.

**ALL PRICES
IN THIS CATALOG
ARE SUBJECT TO CHANGE
WITHOUT NOTICE**

SWEET BANANA—The pointed fruits measure $6\frac{1}{2}$ to 7 in. long by $1\frac{1}{2}$ in. thick, with a banana yellow color turning to a brilliant red at maturity. The flavor is sweet and appealing, and the flesh is thick for a pepper of this type. Heavy yielder; 20 to 24 in. tall. Pkt, 15c.

WORLD BEATER—One of the best large peppers. Glossy-green, changes to bright red. Mild, very sweet, thick flesh. 75 days.

Hot

HUNGARIAN WAX—Slender, waxy yellow fruit about 6-in. long turns red when ripe. Very hot, 65 days. 15c.

LONG RED CAYENNE—The hot favorite. For canning, pickling, drying. Pungent flavored fruit, tapering and twisted. Matures in 70 days. 15c.

PUMPKIN

Plant in middle of spring among corn; or in hills 8' apart each way. Drop 4 seeds to a hill. If planted in hills, cultivate the same as melons and cucumbers. For winter use gather before frost (leave stem 3" to 4" long) and store in warm, dry place.

CONNECTICUT FIELD—Large fruit with flat ends, 15 to 25-lbs. and up to 15-in. Surface, slightly ribbed, deep orange. Thick flesh, orange-yellow, sweet and coarse. 118 days.

KING OF THE MAMMOTH—Largest of all pumpkins. Valuable for stock feeding and exhibition. Globular, slightly ribbed, flattened, weigh 60 to 90-lb. Flesh solid, yellow-orange, coarse, but good quality. 120 days.

SMALL SUGAR OR NEW ENGLAND PIE—Desirable for pie or general use. Round, flat end fruit, deep orange. Thick, yellow-orange flesh. 118 days.

RADISH

Soil should be light, quick and rich to insure rapid growth. Slow growth makes the flavor too strong. Sow as early as ground can be worked, as radishes are very hardy. Make successive sowings up to hot weather. When in the third leaf, thin to give roots plenty of room. Pull promptly when mature. The secret of crisp, delicious radishes is quick growth, prompt picking.

● **CHERRY BELLE**—A popular short-topped type for both forcing and outdoor garden use. Round, smooth and red, with crisp firm white flesh. Extra early. 22 days.

COMET—Round, bright scarlet skin and tender white flesh which remains crisp for a long time. Ideal of home and market gardens. 15c.

CRIMSON GIANT—Large round, 1 to $1\frac{1}{2}$ -in. Deep crimson roots. Very crisp and tender for its size. 28 days.

EARLY SCARLET TURNIP, WHITE TIPPED—Carmine red with white tip. Flesh white, crisp and mild. 26 days.

FRENCH BREAKFAST—Roots thicker toward bottom. $1\frac{1}{2}$ -in. long by $\frac{1}{2}$ to $\frac{3}{4}$ -in. Dull scarlet, white tipped. 25 days to maturity.

WHITE ICICLE—Tapering roots 5 to $5\frac{1}{2}$ -in., White, mild flesh. 27 days.

Fall and Winter Varieties

CELESTIAL OR CHINESE WHITE WINTER—White flesh, rather mild in flavor. Roots large, 8" long and $2\frac{1}{2}$ to 3 inches in diameter, cylindrical with heavy shoulder. 60 days.

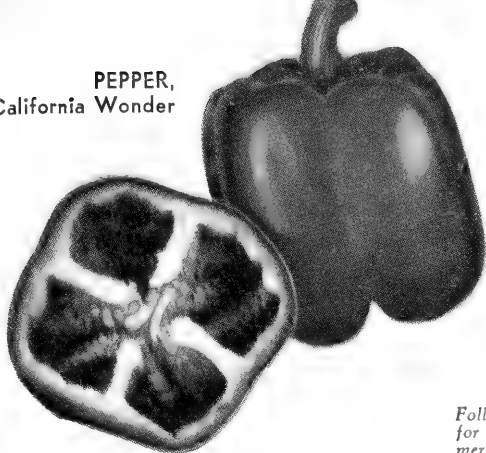
LONG BLACK SPANISH—Good keeping winter variety. White, crisp and pungent. 8 to 9-in. long, slightly tapered. Edible in 58 days.

OKRA
Perkins Mammoth

RADISH
Early Scarlet Globe

SQUASH
White Bush Scallop

PEPPER,
California Wonder



ROUND BLACK SPANISH—Top-shaped. 3" to 4". Flesh white, crisp and of strong flavor. 56 days.

RUTABAGA (SEE TURNIP)

SALSIFY

Light, rich soil best and it must be stirred to a considerable depth. Sow in rows 18" apart. Cover seeds firmly with 1/2" of fine soil and thin plants later to 2" to 3" apart in the row. Cultivate the same as carrots.

MAMMOTH SANDWICH ISLAND—A palatable and nutritious vegetable when cooked. Flavor is remarkably similar to oysters. 120 days.

SPINACH

Plant seed in very rich soil in rows spaced 14" to 18" apart. Keep plants thinned out from 3" to 6" apart in the row. (Seed may also be sown broadcast) Sown in fall for winter use and spring for early use.

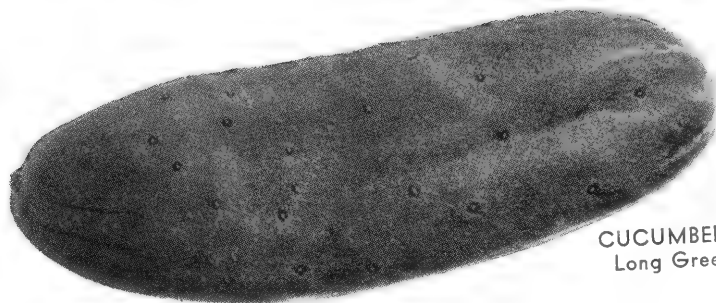
● **AMERICA**—The best long-standing, heat-resisting, heavy-yielding, savoy-leaved spinach. 6 to 8 inches high and spreads 10 to 12 inches. 62 days.

BLOOMSDALE SAVOY, LONG STANDING (fr)—A few days later than regular Bloomsdale Savoy. Holds from 12 to 14 days longer. 42 days.

GIANT NOBEL OR GIANT THICK LEAF—Large, vigorous, spreading plant, slow to form seed stalks. Heavy yielder. Large, thick smooth, deep green leaves. 45 days.

NEW ZEALAND—Thrives in dry hot weather. Can be picked repeatedly all season. Not a true spinach, but similar when cooked. 70 days.

PEPPER—Sweet Banana



CUCUMBER,
Long Green

SQUASH

Follow same planting and culture as for melons and cucumbers. Plant summer varieties 6 or 8 seeds in hill 3' to 4' apart each way and winter squash 8' apart. Plants bear longer if squash is picked off as soon as it is ready for use.

Summer Varieties

CRYSTAL BELL—Fruits deep bell-shaped. 7 in. across and 5 to 6 in. deep when matured. Deep scallop round the lip of the bell. An improved Early White Bush. 25c.

● **EARLY PROLIFIC STRAIGHTNECK** (fr)—Earlier, smaller, and more productive than Giant Summer Straightneck, and more uniform. Brilliant yellow. Fine for home or market. 50 days.

EARLY WHITE BUSH SCALLOP—Pale green fruits changing to creamy white. Milk-white delicious flesh. Used for stewing or boiling.

GIANT SUMMER CROOKNECK—Prolific bush type plant, curved neck fruits around 4 to 5-lb., 20 to 24-in. long. 4 to 5-in. diameter. 56 days.

MAMMOTH WHITE BUSH SCALLOP—3 1/2" long. 9" in diameter. Retain their white color at later stages. 56 days to maturity.

ZUCCHINI—Straight, cylindrical fruits, 3 to 4-lb., 3 to 5-in. through 10 to 14-in. long. Mottled and striped green-creamy-gray. Delicate flavored flesh. 60 days.

Fall and Winter Varieties

BANANA—Cylindrical and pointed at blossom end. Thin, gray rind. Thick flesh, fine grained, yellowish orange and of sweet flavor. 105 days.

BUTTERNUT—Dry sweet yellow flesh of superb texture and excellent flavor. Has only a small seed cavity. Is tasty baked or boiled. Easily grown and a good keeper.

BLUE HUBBARD—Blue-gray, slightly ridged fruits. Shell is rough and very hard. Keeping quality excellent. Flesh bright yellow-orange, fine grained, dry and sweet. Desirable for freezing.

GOLDEN HUBBARD—An early, small variety. Fruits pointed at each end moderately warted. Dry, deep orange flesh.

TABLE QUEEN OR DES MOINES OR ACORN (fr)—Acorn-shaped, green, deeply furrowed flesh rich yellow, dry, mealy, delicious. Convenient size for baking and serving in halves. 100 days.

UNCONN—A highly productive squash of the "Table Queen" or "Des Moines" type. Bushy plants that do not have the rambling characteristics of most squashes. An excellent keeper. Dark green shell with golden flesh. About 5" in diameter.

SWISS CHARD (SEE BEETS, LEAF)

TOMATOES

BEEFSTEAK—Rich scarlet-red, extra large fruits, more or less ribbed. Juicy, solid, with rich sub-acid flavor. One of the best for home use. 90 days.

BONNY BEST—One of the most popular second-early tomatoes. Fruits smooth, solid, bright scarlet red, borne in cluster of 3 to 5 medium size. 15c.

BURPEE'S BIG BOY—Large hybrid tomatoes. Perfectly smooth, deep globe in shape and very firm, scarlet-red skin thick walls, with fine flavor and excellent quality, many weigh 1 pound. 50c.

EARLIANA—Open, spreading, medium small vines. Red fruits run to medium size. Thick; smooth fruit. 66 days.

FIRESTEEL—Scarlet red. Medium size, almost globular, smooth small core. Very fleshy and firm. Practically no cracking.

JUBILEE—Orange colored fruit. Juicy with few seeds. Weighs about 6 oz. Bears over a long season. 72 days.

MARGLOBE—Moderately productive, with heavy foliage. Vigorous and resistant to wilt and rust. Fruits medium large, nearly round, smooth, and solid. Deep red. 77 days.

OXHEART—One of the largest pink tomatoes, often weight 1 lb. Interior is solid with thick, firm walls and small cavities with few seeds. Noted for its appealing flavor.

● **PRITCHARD'S SCARLET TOPPER**—Medium to large round, with thick, firm flesh and small seed cavities. Brilliant red throughout, coloring right to top, without hard green spots. Free from acidity, one of the best home canners. Early.

RUTGERS—Second early variety. Large thick stems, vigorous foliage. Fruits similar to Marglobe but flatter at stem end. Bright red, with thick walls. Red, firm flesh, low acidity. 72 days.

STOKESDALE—An extremely important development. Smooth 7-oz. fruit, brilliant color, exceedingly solid flesh and small seed cavities. Matures in the second-early group, a full week earlier than Marglobe.

STONE IMPROVED—Medium late. Ripens evenly and is uniform. Fruits large, flattened but deep. Smooth, attractive, scarlet-red, of fine flavor. 86 days to maturity.

VALIANT—Large-fruited early tomato, Vigorous, medium size plant. 15c.

Small Fruited

Red and yellow varieties, shaped like miniature pears, plums, and cherries; very attractive for preserves.

TURNIP

GOLDEN BALL OR ORANGE JELLY—Medium size, deep yellow with bronze-green top. Creamy yellow flesh of fine texture. 65 days.

PURPLE TOP WHITE GLOBE (fr)—Large, sweet tops. Smooth, globe-shaped roots, purple-red above, white below. Sweet tender, crisp, white flesh. 50 to 60 days.

PURPLE-TOP STRAP LEAF—Home and market garden variety. Deep purplish-red on top, white below. Flesh white and never stringy.

Rutabaga or Swede Turnip

AMERICAN PURPLETOP—Hardy and productive. Tender firm, light yellow, sweet flesh. 68 days.

VEGETABLE GARDEN PLANTING GUIDE

"TIME TO PLANT" KEY

A—As soon as soil can be worked.
B—Week before last spring frost.

C—In time to allow maturity before freeze.
D—When danger of hard freeze is over.

E—Two weeks before last spring frost.
F—After all danger of frost.

	Seed Required for 50 ft. of row	Distance Between Rows (inches)	Distance Apart In Row (inches)	Depth to Plant (inches)	Time to Plant	Days Growing Period	Edible Period	Approx. Yield Per 50 ft. of Row		Seed Required for 50 ft. of row	Distance Between Rows (inches)	Distance Apart In Row (inches)	Depth to Plant (inches)	Time to Plant	Days Growing Period	Edible Period	Approx. Yield Per 50 ft. of Row
ARTICHOKE	1/8 oz.	48	48	1/4	A				MUSKMELONS	1/2 oz.	60	48	3/4	F	90-120	3-4 wk.	50 fruit
ASPARAGUS	1/2 oz.	24	20	1/2	A	2-3 yr.	4-5 wk.	25 lbs.	MUSTARD	1/4 oz.	24	9	1/2	A-C	28	until fall	1 bu.
BEANS, BUSH	1/2 lb.	24	4	1 1/2	B	50-70	4-5 wk.	20 qts.	OKRA	1 oz.	36	15	1	F	50	until fall	450 pods
BEANS, LIMA	1/2 lb.	24	3	1	B	60-90	3-4 wk.	32 qts.	ONIONS	1/4 oz.	18	4	3/4	A	110-140	4-8 wk.	1 bu.
BEANS, POLE	1/2 lb.	36	8	1 1/2	B	60-90	6-8 wk.	30 qts.	ONION SETS	1 pt.	12	6	1/2	A	50-100	4-8 wk.	60 bun.
BEANS, POLE LIMA	1/2 lb.	48	8	1 1/2	B	88	3-4 wk.	1 1/4 bu.	PARSLEY	1/4 oz.	12	6	1/2	D	90-120	until fall	45 bun.
BEETS	1/2 oz.	24	3	1/2	A	55-100	4-6 wk.	1 1/4 bu.	PARSNIPS	1/2 oz.	18	4	1	A	100-150	until fall	1 bu.
BROCCOLI	1/8 oz.	24	24	1/2	A	80-120	8-10 wk.	25 head	PEAS	3/4 lb.	24	2	1	A	50-70	1-2 wk.	1 bu.
BRUSSELS SPROUTS	1/8 oz.	24	18	1/2	A	70-110	6-8 wk.	15 qts.	PEPPERS	1/8 oz.	30	20	1/2	F	100-140	until fall	300 fruit
CABBAGE	1/4 oz.	24	12-24	1/4	A	75-130	4-6 wk.	35 head	PUMPKIN	2 oz.	96	60	3/4	F	90-120	until fall	25 fruit
CHINESE CABBAGE	1/2 oz.	24	12	1/2	C	75-85	4-6 wk.	40 head	RADISH	1/2 oz.	12	2	1/2	A	25-30	1-2 wk.	50 bun.
CARROTS	1/4 oz.	16	3	1/2	A-C	65-85	4-8 wk.	24 qts.	RHUBARB	1/2 oz.	48	48					100 stem
CAULIFLOWER	1/4 oz.	24	20	1/2	A-C	65-90	1-2 wk.	25 head	RUTABAGA	1/8 oz.	24	6	1/2				1 bu.
CELERY	1/8 oz.	24	6	1/4	D	100-140	6-8 wk.	100 stalk	SALSIFY	1/2 oz.	18	2	1/2	A	130-150	fall	300 roots
COLLARDS	1/4 oz.	30	18	1/2	C	24-36	until fall	3 bu.	SPINACH	3/4 oz.	18	5	3/4	A-C	40-60	1-3 wk.	1 1/2 bu.
CORN, SWEET	4 oz.	36	9	1	E	65-100	1-2 wk.	100 ears	SPINACH, N.Z.	1/2 oz.	36	18	1	D	70	until fall	50 lbs.
CORN, POP	3 oz.	34	8	1	E	115			SQUASH, BUSH	1/4 oz.	48	48	1	F	60-80	until fall	60 fruit
CUCUMBER	1/2 oz.	48	36	1/2	F	60-100	4-6 wk.	100 fruit	SQUASH, WINTER	1/4 oz.	72	72	1	F	100-140	fall	35 fruit
EGGPLANT	1/8 oz.	36	24	1/2	F	110-150	until fall	75 fruit	SWISS CHARD	1/2 oz.	18	15	1	A	50-60	until fall	25 lbs.
ENDIVE	1/2 oz.	18	12	1/2	A	80-100	3-4 wk.	50 head	TOMATOES	1/2 oz.	40	36	1/2	F	100-150	6-12 wk.	2 bu.
KALE	1/2 oz.	32	22	1/2	A-C	70-100	until fall	50 plants	TURNIPS, ROOTS	1/4 oz.	18	4	1/4	A-C	50-70	1-3 wk.	1 bu.
KOHLRABI	1/4 oz.	24	6	1/2	A-C	55-75	2-3 wk.	1 bu.	TURNIPS, GREENS	1/2 oz.	12	4	1/4	A-C	50-60		1 1/2 bu.
LETTUCE	1/4 oz.	18	12	1/4	E	90-120	3-4 wk.	50 head	WATERMELONS	1/2 oz.	60-96	60-96	3/4	F	90-130	3-4 wk.	20 fruit

These Vegetables Have Stood The Test

The vegetables pictured and described on these two pages are varieties which have been tested and proved for high quality, flavor, tenderness and high yield, plus disease resistance.

They provide a nicely balanced collection for a home garden, are adapted to our local climate and soil conditions and give both garden and table satisfaction.

Best Times To Harvest

Beans should be tender, from half to three-fourths of the mature size. They should snap easily with no fibers.

Lima Beans are at their best just as the lower end of the pod shows a faint tinge of yellow.

Beets can be used at any time. The young plants are fine for greens. When the roots are large enough to handle, they may be used separately. Beets are best when less than 2 inches through.

Carrots can be used from finger size up. Flavor and tenderness begin to deteriorate in most varieties when they grow larger than 1 1/2 inches across.

Corn is sweetest when in the milk stage. This can be recognized by the silk turning brown and dry.

Cucumbers make the best salads when the seeds are still immature. The fruits are best if they are about 3/4 of the mature length.

Peas are sweetest just as the seeds reach mature size. Press the pods lightly, if the seeds feel about the same size as the ones you planted, and the pod is a bright green, it is ready for picking.

Leaf crops for salads are best harvested in the cool of the day. They should be protected from drying.

Melons should be vine ripened for real flavor. The blossom end should have a soft, springy feel when pressed.



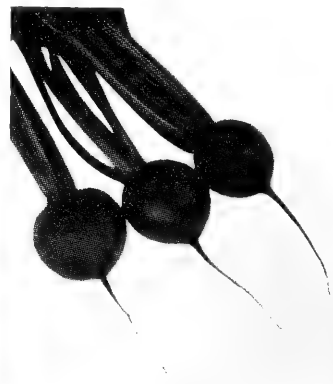
FORDHOOK NO. 242 BUSH LIMA—Straight pods with plump, large beans. Especially recommended for productivity under adverse conditions.



PRITCHARD TOMATO (Scarlet Topper)—Ideal all-purpose red tomato. Medium to large round with thick firm flesh and small seed cavities.



TOPCROP BEAN—Meaty, entirely stringless and without fiber. Highly productive and resistant to common bean mosaic.



PERFECTED DETROIT BEET—Standard of excellence in table beets. Smooth, globular roots of deep ox-blood red. Sweet and tender.

It Was New to Me!!

Did you know that some weeds often indicate the condition of your soil?

Sheep's sorrell and **wild strawberry** plants indicate that the soil is acid and calcium is needed.

Wild buttercup grows in moist clay-loams, and **Self heal** also indicates that there is too much clay.

Devil's Paintbrush says that the land needs organic matter and **Sedges** and **Bushes** indicate that drainage is necessary. The appearance of **wild garlic** announces that the ground is rich.

* * *

Have you ever used your refrigerator as a garden tool? In hot weather, it's the perfect place to start certain seeds that ordinarily won't sprout except in cool weather. Take lettuce and larkspur for instance. These won't grow if you plant them in mid-summer heat out-of-doors. But mix the seed with a little sand, vermiculite, or peat moss, stand it under the ice cube compartment for a week, and it will sprout in a hurry. Then plant in the regular way and it will grow normally. The ideal temperature for germination of most cool-weather plants is 42 degrees. Containers should be covered to hold back loss of moisture.

Tricks with Herbs

Sprinkle caraway or anise seed on baking powder biscuits . . . chopped fresh leaves of dill on broiled steaks or chops. Cover with melted butter and allow to stand in a hot oven for a few minutes.

For a new taste thrill flavor omelettes with chives, parsley, summer savory and basil, or use a mixture of thyme, basil, summer savory and chives.

Fertilizer Facts

A standard garden encyclopedia offers this excellent advice: "In buying fertilizers the gardener will do well to follow the practice of the most successful commercial growers, namely to confine his selection to standard brands that have given satisfactory results over a long period of years, and to make his final choice upon the basis of the actual cost of the plant food ingredients rather than the prices of the mixtures as a whole. Some mixtures which cost more than others are actually more economical than others that cost less, when the contents of each are calculated on the basis of actual fertilizing ingredients.

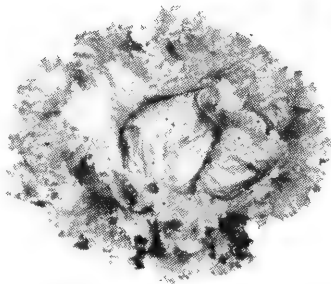
"Sometimes analysis figures do not convey the true worth of a mixture, especially if not backed up by a reliable manufacturer or dealer. Some ingredients may be slowly soluble or practically insoluble in one brand but readily so in another. For instance, a fertilizer composed of wood ashes, ground phosphate rock and sulphate of ammonia would not be comparable in value, though having the same percentage analysis, as another composed of nitrate of soda, muriate of potash, and superphosphate. Hence it is important to know what the composition is as well as how much of each ingredient is in the mixture." We offer special purpose fertilizers for use wherever a special formula is needed. Knowing the soil conditions and growing problems of this territory as we do, we can prescribe just the right formula for every case.

We have fertilizers for vegetable gardens, flowers, roses, trees, lawns,—whatever the need.

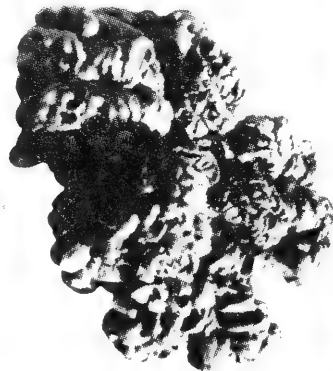
Whether you know the formula you want—or want one recommended especially to handle some situation of your own, be sure to consult us.



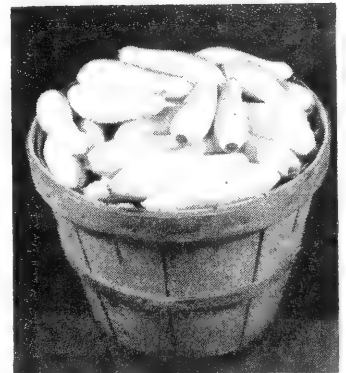
CHERRY BELLE RADISH — Round, smooth red radishes $\frac{3}{4}$ inch across. Resemble cherries in shape and color. Flesh is white, crisp and firm.



GREAT LAKES LETTUCE — Outstanding Iceberg or Crisp head type. A summer lettuce that stands heat well. Resistant to tip burn.



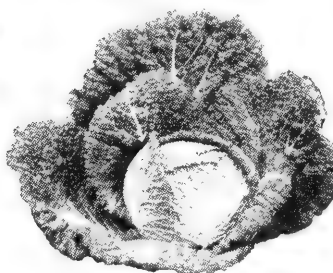
AMERICA SPINACH — The best long-standing, heat-resistant, heavy yielding, savoy-leaved spinach. Leaves glossy, dark green, thick and tender.



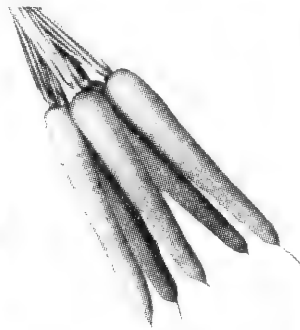
EARLY PROLIFIC STRAIGHT-NECK SQUASH — Fruits are creamy yellow. Heavy yielder or unsurpassed quality.



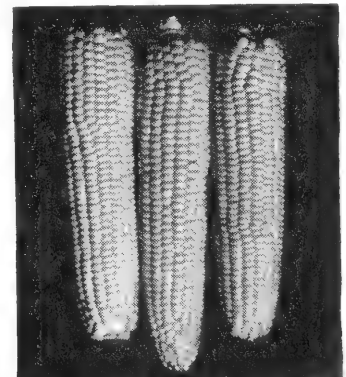
EARLY SURECROP HYBRID CUCUMBER — Slender, dark green with crisp white flesh. Unusually delicious. Disease resistant.



CHIEFTAIN SAVOY CABBAGE — Flattened globe-shaped. Crumpled leaves. Is of outstanding quality and flavor.



EMPEROR CARROT — Exceptionally heavy yielder and always smooth and uniform. Fine-grained, tender. Rich orange, indistinct core.



IOCHIEF SWEET CORN — A yellow hybrid sweet corn with sensational qualities. Sugar sweet and tender. Stays prime longer.



DOUBLE PEONIES

The exciting color of crocus, tulips, daffodils and other spring flowering bulbs is the most rewarding result of good planning. This spring, when all the bulbs are flowering is the time to make your selections for fall planting. Choose bulbs from named varieties for the most pleasing display of color.

Planting time for these bulbs starts in September and can continue into November, or as long as you can work the soil.

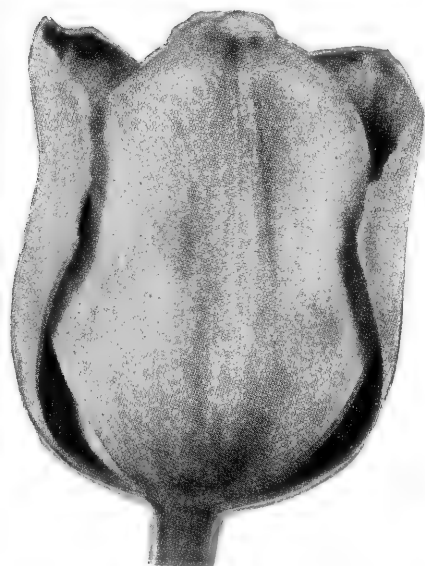
Blooms develop from the strength stored in bulbs and tiny flowers are actually present when you buy them.

To prepare a bed for your bulbs, fork or spade the soil about 8 inches deep. Mix one to two quarts of peatmoss, leafmold or other humus into each 18-inch planting area.

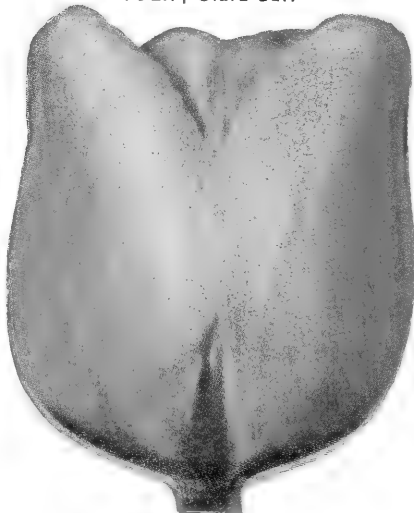
Plant food must not touch the bulbs. Spread it in the bottom of the prepared hole or trench and cover with two inches of soil before setting the bulbs.

If the soil is dry, water the area the day before you set the bulbs. If it is still powdery dry when you put in the bulbs, press the soil over the planted bulbs with the palm of your hands, then apply water in a ring outside the planted area. Don't plant bulbs where water stands.

TULIP,
Wm. Copeland



TULIP, Clara Butt



There is an almost endless number of kinds and varieties of Tulips, Narcissus, Hyacinths and Crocus, and it's important to know some of the names of those that will reward you with the biggest and most beautiful blooms. The Tulips and Narcissus listed below are all good, moderately priced and give a wide range of color.

NARCISSUS

Large trumpets: WHITE—Beersheba, Mrs. E. H. Krela; BICOLOR Imperator; YELLOW—Golden Harvest, King Alfred.

Medium trumpets: WHITE—Firetail, Lady Diana Manners; WHITE & YELLOW—Queen of the North, Bernardino; WHITE & ORANGE—Francisca Drake; YELLOW—Diana Kasner.

Poet's Narcissus: WHITE—Actea, Homer, Horace, Ornatus.

Cluster Flowered: WHITE & YELLOW—Laurens Koster; ORANGE & WHITE—Geranium; YELLOW & GOLD—Helios; YELLOW & ORANGE—Admiration.

Double Flowered: WHITE—Daphne; WHITE & YELLOW—Irene Copeland; WHITE & ORANGE—Cheerfulness; PRIMROSE & ORANGE—Twink.

For Naturalizing: Emperor, Ornatus and Sir Watkins.

TULIPS

Single early: WHITE—Albion; PINK—Pink Beauty; YELLOW—Rising Sun; RED & YELLOW—Keizerskroon; ORANGE—De Wet; RED—Couleur Cardinal.

Double Early: WHITE—Boule de Neige; WHITE & ROSE—Murillo; ROSE-PINK—Peach Blossom; YELLOW-ORANGE—Couronne d'Or; SCARLET—Scarlet Cardinal.



NARCISSUS

Double Late: WHITE—Mt. Tacoma; ROSE-PINK—Eros; DARK RED—Uncle Tom.

Cottage: WHITE—Carrara; LEMON YELLOW—Golden Harvest; PINK & BUFF—Marjorie Bowen; DEEP PINK—Dido; GOLDEN YELLOW—Belle Jaune; SCARLET—Marshall Haig.

Darwin: WHITE—Glacier; PINK—Clara Butt; YELLOW—Yellow Giant; CHERRY-ROSE—King George V; HELIOTROPE—The Bishop; SCARLET—Farncombe Sanders; RED—Eclipse; MAROON BLACK—La Tulipe Noire.

Breeder: TERRACOTTA YELLOW—Prince of Orange; GOLD & TERRACOTTA—Cherbourg; PURPLE & GOLD—Louis XIV; PURPLE BRONZE—Cardinal Manning; COPPER RED—Indian Chief; FLAME—Dillenburg.

Parrot: PINK & GREEN—Fantasy; BLUE HELIOTROPE—Blue Parrot; HELIOTROPE & LAVENDER—Gadelan; ORANGE & GREEN—Orange Favorite; YELLOW—Sunshine; SCARLET & BLACK—Red Champion.

AFTER THEY BLOOM

After flowering, the bulbs go to work on storing up food supplies that enable them to produce good flowers the following spring. In this food production, vigorously growing leaves are essential. A general-purpose fertilizer applied just after bloom will be helpful. So will good maintenance.

How?

When?

Where?

Why?

PLANT FEEDING

Gardeners all know that if the soil is to feed the plants year after year, then the gardener must help the soil by supplying plant food. A large portion of the soil's native fertility is lost each year through removal of plant growth, and by erosion and leaching. Seldom is a soil to be found which has not been exhausted of one or more of the vital plant food nutrients.

Fortunately, plant feeding is a rather simple and easy job. While plants require many different elements from the soil, these can be provided by just one complete, balanced plant food, such as Vigoro* and Instant Vigoro. Without odor or muss, modern complete balanced plant food takes care of all the vital nutrient needs of plants, regardless of the soil's natural fertility level.

The physical condition of the soil is also important. If it is low in organic matter, if it bakes and cracks when dry, or is too sandy, it can be improved by addition of humus and conditioning materials such as peat moss, compost, and vermiculite.

A Matter of BALANCED Diet

Buying plant food for lawns and gardens is like buying food for your table. To keep healthy, you need a balanced diet . . . you would not think of keeping your children on an all starch diet just because it is cheaper. You know they need proteins and minerals, too.

It is the same way with flowers and vegetables, too. They need many different plant food elements from the soil for root, stem, fruit or flower development. For these reasons, we recommend Complete Plant Food, which supplies in balanced proportions the vital nutrients plants need from the soil for the best growth and development.

For LAWNS:

Apply evenly according to manufacturer's instructions. (With New Process Vigoro, you'll need only 3 lbs. per 100 sq. ft.)

For hot weather feeding or supplemental feeding to stimulate summer growth and deepen foliage color we suggest liquid feeding with Instant Vigoro. (Like famous Vigoro, Instant Vigoro is complete plant food.)

For FLOWERS, VEGETABLES, BERRIES

Apply complete plant food at the rate of 4 pounds per 100 sq. ft. of area before seeding or setting plants. For established perennials apply around plants or along both sides of row early in spring at six to eight week intervals.

When setting out vegetable and flower plants use two level tablespoons of Instant Vigoro per gallon of water and pour one cup of solution around roots of each plant. For summer feedings of liquid plant food follow the manufacturer's recommendations.

For TREES

Make a series of holes 12 to 18 inches deep with 2" soil auger or a pointed stick under the drip of the branches. Figure the plant food need per tree by measuring the diameter four feet from the ground and allowing 3 pounds of complete plant food per inch of diameter. Fill holes with a mixture of half Vigoro and half soil or sand.

TWO MORE GARDENING TIPS

Good cultural practices call for keeping weeds out of your lawn and garden.

In the garden, you will have to use the hoe. In the lawn, however, you'll find it simple and easy to spray weeds away with modern weed killers such as End-o-Weed 2,4-D Lawn Weed Killer which kills over 100 kinds of weeds and End-o-Weed Crab Grass Killer that kills ugly crab grass.

Finally, you must keep insects and fungus disease under control. We have a complete line of insecticides for every need. But, if you grow a variety of things, you'll get better results and save time and money by using an all around insecticide, such as End-o-Pest, 3-Way garden dust to prevent and control all major types of chewing and sucking insects and fungus diseases. For the control of such pests as ants, roaches, and chiggers in buildings and yards we suggest a chlordane formulation such as End-o-Pest ARC.

If you plant right, weed right and protect right . . . you'll get better results and more pleasure and benefit from the seed you buy from us.

The VIGORO Family of Gardening Aids!



*Vigoro is Swift & Company's trademark for complete plant food.

INSTANT
VIGORO
 Complete Plant Food

IN CONCENTRATED FORM FOR LIQUID PLANT FEEDING

Like famous Vigoro, Instant Vigoro is a complete plant food. It is prepared in a concentrated crystalline form designed for liquid feeding. Ideal for foliar feeding (Absorption of nutrients through the leaves of the plant) as well as for normal root-zone feeding.

VIGORO has spelled top-quality plant food for many years, and INSTANT VIGORO will give equally fine results. Ideal for gardeners who prefer to apply plant food in liquid form.

It comes in convenient size packages; 8 oz., 16 oz., 3 lb., and 25 lb., for feeding house plants or the largest lawn.

WEED KILLERS

PREVENT WEEDS

before they grow



\$1.50

ONE CAN TREATS 3,000 SQ. FT.

for Strawberries, Beans, Corn, Asparagus, Roses, Perennial Flowers, Shrubs, and Evergreens.

With all the miraculous weed killers on the market now, the backache of weeding is over.

There's the new "Crag Herbicide-1" which prevents weeds before they grow. Since it's not a weed killer when it's sprayed on, there's no danger to the plants.

2-4-D, the selective killer (Weedone, End-O-Weed, Weed-no-more) will do nearly all the work without a bit of digging. You just spray it on. And the non-poisonous Weedone Crab Grass Killer will get rid of crab grass, chickweed, etc., just by spraying on.

WEED-NO-MORE

2,4-D. Rids lawns of ugly weeds such as dandelion, plantain, chickweed, ragweed, poison oak and many others without injury to common lawn grasses. Don't dig—spray the weeds away! A handy applicator fits a gallon or half-gallon jug for easy spraying. 8 oz. bottle covers average size lawn \$1.00; quart \$2.98; applicator 49c free with purchase of quart size.



NEW IMPROVED WEEDONE

Contains the powerful 2,4,5-T and 2,4-D

Now Weedone kills woody plants as well as dandelions, plantains and other lawn weeds, without killing grass. It kills poison ivy, poison oak, the brambles (blackberry and raspberry), honeysuckle and over 90 other woody plants. Sprayed on top and sides of tree stumps, it prevents resprouting.

The new, improved Weedone does not give off vapors that cause injury to rose bushes, tomatoes, flowers or ornamental shrubs. Harmless to humans and animals.

8-oz. can \$1 1-qt. can \$2.75

1-gal. can \$6.75

Weedone Plastic Applicator. Cap makes handy 1/2-oz. measure and fits any screw-top gallon jug. All plastic; no sharp metal edges to cut and scratch hands.



GROWTH AIDS

Plant hormones, the modern garden wonder, can do many amazing things. They stimulate seed germination, make cuttings root faster, give you better seedlings, help transplanting by reducing shock and wilt. They stop fruit and blossoms drop, produce better tomatoes, beans, etc., and help in many other ways.

But, for the best results, be sure you have the right hormone for each purpose! We have them all and can advise you about their correct use.

—At Your Seed Store!

IT'S FUN TO MAKE CUTTINGS FROM YOUR FAVORITE PLANTS ROOTONE with Fungicide

It's easy. Rootone stimulates the natural tendency of cuttings to put out roots. Newly added fungicide protects against damping-off and other soil-borne diseases.

1/4-oz. packet 25c • 2-oz. pkg. \$1
1-lb. can \$5.00

MORE TOMATOES! FRUITONE

Spray Fruitone at blossoming time and each plant will set more fruit and bear more big, meaty tomatoes. Spray Fruitone for bigger crops of beans and lima beans, too. The dollar package makes 25 gallons of spray.

2/5 oz. packet, 25c • 2-oz. pkg., \$1
12-oz. can, \$5

THE NONPOISONOUS WEEDONE CRAB GRASS KILLER

Contains potassium cyanate. Highly effective, but non-poisonous to humans and animals. Kills crab grass and chickweed, without killing bluegrass, clover or other deep-rooted grasses. Clean, economical and easy to use.

6 1/2-oz. can, \$1 • 26-oz. can, \$3
6 1/2-lb. can, \$8.85

TRANSPLANTONE

Hormone-Vitamin Combination
Reduces wilt and loss when transplanting

Vegetable gardeners: Cut down transplanting losses; give seedlings healthier roots. Get earlier, larger crops of tomatoes, finer cabbage, cauliflower, lettuce.

Flower gardeners: Use Transplantone when transplanting seedlings and shrubs, to get finer blooms, stronger growth.

1/2-oz. packet, 25c • 3-oz. packet, \$1
1-lb. can, \$4

INSECTICIDES & FUNGICIDES

All-Round Bomb (Acme)—Self sprayer package for immediate and effective protection against common insects.

All-Round Spray (Acme)—Multi-purpose formula for roses, shrubs, fruit trees. This one spray does the job. (See Acme display for full data.)

Antrol Traps—Kills both sweet and grease eating ants.

Arasan (Seed Treatment)—An effective dry seed disinfectant and protectant for destroying surface seed-borne organisms and protecting the seed against soil-borne organisms responsible for seed decay.

Arsenate of Lead—Controls practically all leaf-eating or chewing insects.

Bordeaux Mixture—Standard copper insecticide for controlling black spot, mildew, blight, other fungus diseases.

Calcium Arsenate—Cheap quick-acting poison for potato bugs; leaf-eating insects.

Black Leaf 40—Nicotine Sulphate 40% solution for controlling aphids (plant lice), thrip and soft bodied sucking insects.

Chlordane Dust (Acme)—The new control for a large group of insects in the lawn, garden, and indoors.

Paris Green—For control of chewing insects, particularly potato bugs.

Red Arrow Garden Spray—Contains Pyrethrum, Rotenone, Soap. Harmless to animals.

Red Arrow Dust—Use as spray or wash for fruits, flowers, vegetables.

RED ARROW GARDEN SPRAY

Non-poisonous. Kills most chewing and sucking insects quickly, safely. 1 oz. makes several gallons of spray.



1 oz., 4 oz., and 1-pint bottles

Ask for free booklet
"It's Easy to Control Garden Insects"
A PRODUCT OF **McCORMICK & CO.**
Baltimore 2, Md.

RED ARROW AGRICULTURAL DUST

$\frac{3}{4}\%$
ROTENONE!



Non-poisonous—spray or wash. Kills bean beetles, cabbage worms, etc. Dust about every 10 days.

2-lb. and 5-lb. packages
(1% Rotenone in 50-lb. drums)

A PRODUCT OF **McCORMICK & CO.**
Baltimore 2, Md.

ACME INSECTICIDES

ACME ALL ROUND BOMB Self Sprayer Package



Here's a handy bomb that's ready to guard your prized plants both indoors and outside by just a "press of the lever" at the top of the can. Rotenone, pyrethrins, and piperonyl cyclonene are combined to give instant protection to plants against common insects. 10 oz.—\$1.50 ea.

ACME ALL ROUND DUST Pump Gun for Easy Application

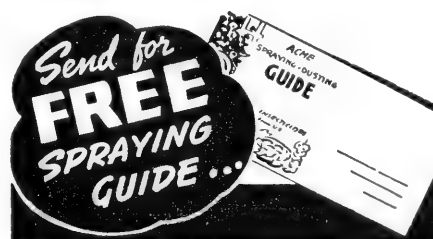


Dust and duster all in one! An easy-to-use efficient pump gun filled with a combination of insecticides and fungicides for control of common insects and plant diseases. Equally effective for use on flowers—vegetables—bush fruits. 8 oz.—\$8.00 ea.

ACME ALL ROUND SPRAY Spray or Dust Power



A fruit spray—a flower spray—useful on vegetables—truly an All Round Spray. Combining two insecticides and two fungicides, one or more of which are at work at all times. Helps eliminate the problem of picking special controls for specific problems. 1 lb.—\$1.10 ea. 4 lb.—\$3.45 ea.



ACME 6% CHLORDANE DUST A Sure Ant Killer

Easy application—just sift on lawns or in gardens. Controls many soil borne pests. In lawns—ants, chinch bugs, chiggers, sod webworm; in gardens—cutworms, earwigs, sowbugs, wireworms, white grubs, and root maggots. 1 lb.—\$.60 ea. 4 lb.—\$1.50 ea.



ACME GARDEN GUARD America's Favorite Rotenone Dust



Has many uses in vegetable and flower gardens. Kills most common garden insects of the sucking and chewing types. Safe to use on edible portions of plants right up to picking time. Shake from the sifter package hitting insects to be controlled. 1 lb.—\$.50 ea. 4 lb.—\$1.25 ea.

ACME 50% MALATHION SPRAY

A New Safe Phosphate Type Spray



Sensational phosphate type sprays have been too dangerous for common use. Malathion is a phosphate yet considered one of the safer insecticides. Controls flies, mosquitoes, certain common insects, mealy bugs, certain scale, and mites. Kills flies that are DDT resistant. Useful in dairy barns and on fruits and vegetables to within 14 days of picking time, and on flowers too. 1 oz.—\$.50, 4 oz.—\$1.25, Pint—\$3.00, Quart—\$5.25.

ACME 5% LINDANE SPRAY Kills Wide Range of Insects

This new super-killing insecticide gives fast control of a wide range of insects. Especially useful for spraying foliage and flowers; and controlling hard-to-kill bugs in early spray of fruits and vegetables. Also effective on turf and soil insects. 4 oz.—\$.75, Pint—\$2.40.



Protect Garden Beauty,
Conserve Food with

HUDSON SPRAYERS, DUSTERS



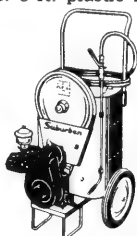
SIMPLEX® SPRAYERS
Safest compression
sprayers. Cover seals
from inside. 3 or 4
gal., galvanized or
stainless steel.



FAVORITE® SPRAYER
Lightest 1 3/4 gal. home
sprayer. Saf-T-Lok*
for easy sealing, safer
opening. 5-spray noz-
zle. 5-ft. plastic hose.



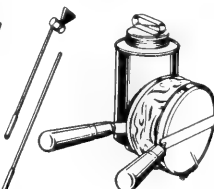
SAF-T-LOK® SPRAYER
New Saf-T-Lok top
... easy to seal, safe
to open. Powerful
pump. Galvanized
tank. 2 1/4, 3, and 3 1/2
gal. sizes.



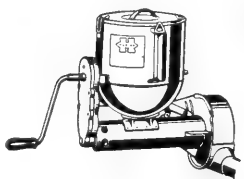
**SUBURBAN®
POWER SPRAYER**
New 10-gal. model—
easy to handle, oper-
ate. Sprays any solu-
tion. 15' hose, adjust-
able nozzle.



ECLIPSE® Hand Sprayer
Every metal part stain-
less steel for lifetime
beauty, dependability.
2-Spray® nozzle for
mist or surface spray.



DUSQUIK® DUSTER
New. Bellows action
—emits puff or con-
tinuous cloud. Exten-
sion, swivel nozzle.
Scoop in cap. Holds
2 lbs.



ROTO-POWER® DUSTER

Large all aluminum
duster gives greater
air volume at more
speed than any other.
Holds 14 lbs. any
powder pesticide.

ADMIRAL® DUSTER
Applies 1 qt. any pow-
der pesticide uni-
formly, easily. Long
extension, swivel noz-
zle for easy dusting.

*TRADE MARK

SIGN OF THE BEST BUY

BUY HUDSON

Sprayers, Dusters

Get your
Hudson Sprayer
or Duster NOW!

Tested and Proved
SPRAYERS and DUSTERS

How . . . When . . . Where in INSECT CONTROL

A leading entomologist recently said, "Pro-
gress in the last few years in development
of insecticides has been greater than in the
previous fifty."

The great sensation of the insecticide field
has, of course, been DDT. It can now be
said that DDT has fully lived up to its early
promise of help for the home gardener. It
has rightly been credited with miraculous
results in many serious situations.

However, it must be remembered that DDT
is not a cure-all. No single insecticide can
ever take care of every situation.

Chlordane, the new wonder

Now comes another widely heralded new
chemical miracle for the gardener — chlo-
rdane (also known as 1068). And again the
results are living up to the early promises.
Chlordane must now be recognized as a
great new weapon in the battle with the
insects.

But Chlordane, like DDT, is not a cure-all.
Remember, therefore, to consider it as just
one more tool for the gardener—a highly
valuable tool, but not a universal remedy.

What will chlordane do?

It is highly effective against grasshoppers
and the American cockroach, Colorado po-
tato beetle, squash bug, and some aphids.
It is very effective on ant nests. It is the
fastest working chemical yet found against
Japanese beetle grubs in soil, killing 2 1/2
times faster than DDT.

Further experience probably will increase
the list of victories for Chlordane.

Meanwhile, we suggest that you begin to
use this newcomer, while keeping on with
DDT for the purposes it serves best.

Ask Us for the Remedy!

Insects are spread over the season and in
different stages of life from the egg, the
larva to the bug itself. Their methods of at-
tack vary in two ways either as chewers or
suckers. The wide variety of harmful insects
in their varied stages of life require in some
cases vastly different chemicals to meet the
immediate requirements.

To link up each bug with the insecticide
that will handle him, JUST ASK US. We
keep very close watch on all new develop-
ments. We know exactly which of the new
formulas have proved themselves . . . and
what they can do. This practical knowledge
is at your service, whenever you need it!

PRICES subject to change

As is usual in seed catalogs, we must
notify you that prices are subject to
change without notice. We shall of
course, make every effort to maintain
our listed prices.

GARDEN SUPPLY PRICES NOT PREPAID

While prices quoted on garden seed
include our shipping costs, this is not
the case on our other lines. So, when
ordering garden supply items by mail,
please remember shipping costs are
EXTRA.

For Best Results, Use ANTROL—SNAROL INSECTICIDES



Antrol rose spray Flower Bomb

Handy, push-button way to rid roses
and other outdoor plants of Aphids,
Thrips, Japanese Beetles, Leafhop-
pers, etc. Contains Lindane and
Rotenone.

Antrol African Violet and House Plant INSECT BOMB

New indoor insect bomb protects house
plants from Mites, Mealy-bugs, Exposed
Thrips, White Flies, etc. Ready to use,
safe.



Antrol Ant Killers

Bombs • Traps • Chlordane Spray
Most effective ant killers for home and garden.

Snarol Cutworm Bait

Used by professional growers. Ready prepared meal
with Toxaphene lures, destroys Cutworms, Army
Worms, Grasshoppers. 1, 2 1/2, 6, 50 lb. sizes.

Snarol Meal or Pellets for Snails and Slugs

Contains Metaldehyde. Lures pests from plants,
shrubs . . . kills fast. 1, 2 1/2, 6, 10 lb. sizes.

BM garden insecticides
BOYLE-MIDWAY INC.
Garden Insecticide Div.,
NEW YORK 16, N.Y.
Cranford, N.J. Chamblee, Ga.
Chicago, Ill. Los Angeles, Cal.

Fungicides

2% Ceresan (Seed Treatment) — Reduces
seed rotting and damping-off; gives more
uniform stands with less seed.

New Improved Ceresan (Seed Treatment)—
Kills seed-borne diseases, such as root-rot
and seedling blight, by both contact and
vapor. Use on barley, oats, wheat, rye, sor-
ghum, flax, peas, cotton.

Identify your insects!

Biting or Chewing insects such as beetles,
caterpillars, grasshoppers, and the like, can
best be controlled by the application of
poisons to the plants upon which they feed.

Sucking Insects such as aphids, weevils,
leaf hoppers, etc., insert their beaks into
the leaves, stems or fruits and suck the
plant juices. Hence "stomach" poisons ap-
plied to the surface of the plant will not
kill them. They must be killed by use of
contact poisons.

Scale Insects that develop protective cover-
ings are most easily killed by strong cor-
rosive solutions, such as a concentrated
lime-sulphur mixture, applied during late
fall or winter when foliage is off the plants
—and by other materials.

Feeds plants to beauty!

Yes, Plantabbs actually *feed* plants. Plantabbs "growth" formula includes 11% nitrogen, 15% phosphoric acid, 20% potash. Makes plants grow bigger, healthier, lovelier, indoors or out! Used by millions for over 30 years. 10¢, 25¢, 50¢, \$1.

FULTON'S

PLANTABBS

Complete Plant Food Tablets



HYPONEX

Grows Better Plants Faster
in SOIL, SAND or WATER

Simply dissolve and water all your houseplants, garden flowers, vegetables, shrubs or lawn. Produces stronger plants, more and larger flowers and fruit. Excellent for starting seedlings, cuttings, transplants. Clean, odorless. Won't burn foliage or roots if used as directed. Contains all nutritional elements complete and balanced—plus vitamin B1—Instantly available. Results sure.

1 oz. pkt.....	10c	7 oz. can.....	50c
3 oz. can.....	25c	1 lb. can.....	\$1.00
10 lb. drum, makes 1000 gals.....	8.00		
25 lb. drum, makes 2500 gals.....	15.00		
50 lb. drum, makes 5000 gals.....	25.00		
100 lb. drum, makes 10,000 gals.....	40.00		



Guaranteed by
Good Housekeeping
IF NOT AS ADVERTISED THEREIN



Krilium

SOIL CONDITIONER

gives everything
that grows a
better start!



Why "break your back" working stubborn, hard-packed soil? So easy to change it to crumbly, porous soil with *Krilium soil conditioner*! Just mix Krilium with the earth as directed on the package. Krilium keeps the ground *loose* . . . lets fresh air and water get right down to tender young roots . . . gives them "elbow room" to spread out and take hold. Your flowers, plants, vegetables get a stronger start . . . grow faster and easier into the attractive garden you've always wanted! Krilium: 5 lb., \$4.95; 1 lb., \$1.39; 2 oz., 29¢. Larger sizes for large areas.

Folium

BALANCED PLANT FOOD
helps everything
that grows
grow better!



Monsanto's new
balanced plant food
is the only liquid
leaf-feeding food

with the 20-20-20 formula-

tion of nitrogen, phosphorus and potash recommended for maximum growth! Easy to apply . . . just spray or sprinkle on foliage. Won't clog sprays. Folium furnishes food and drink for flowers, lawns, shrubs, trees, vegetables. Water-soluble . . . absorbed instantly. Will not "burn" tender leaves. With Folium you'll enjoy the healthiest, most beautiful lawn and garden ever. For best results this year, use the famous lawn-and-garden team: Krilium soil conditioner . . . Folium plant food! Folium: 5 lb., \$4.50; 1 lb., \$1.25; 2 oz., 25¢. Larger sizes for large areas.

Folium: Monsanto Trade-mark

MONSANTO
CHEMICAL COMPANY

Merchandising Division
St. Louis 4, Missouri



SERVING INDUSTRY . . . WHICH SERVES MANKIND



Ask us about PLANT FEEDING

The difference between a good lawn—or garden—and a poor one, more often than not, is A MATTER OF FEEDING. The best grass in the world can't give you a good permanent lawn unless the soil is fed, regularly and correctly. Same way with flowers, vegetables, shrubs, trees.

We want to help

That's why we say, "Talk it over with us!" We don't just sell plant foods. We want to help all we can to make sure you get results.

Whether it's window box or a hundred acres to be fed—we have the right food and the "know-how" and the desire to help!

Terra-Lite
GROWS MORE...BIGGER
...FINER FLOWERS
AND VEGETABLES

New Discovery
Transforms
Caked Top Soil
Into Airy Loam!



Terra-Lite* Vermiculite, the magic garden discovery, worked into your top soil, holds and releases air, water and plant food in just the right amounts. You'll have the finest garden you've ever had, with less toil, less watering. Use it for conditioning soil, building lawns and also for starting seeds, rooting cuttings, mulching, storing bulbs—countless other gardening uses throughout the year.

We will gladly help any user to plant wisely in using Terra-Lite. Just ask us. Come in today.

*Terra-Lite is the registered trade mark of the ZONOLITE Company

TRI-CON LAWN FERTILIZING UNIT

\$5.75
Cheaper
Faster



The NEW and EASY way
To FERTILIZE
LAWNS—GARDENS

- Fertilize while you sprinkle
- assured ratio of soluble fertilizer
- no adjustment required
- no possible failure
- long service and dependability
- a three type spray with sprinkler base
- 3 units in one—Fertilizer Applier-No. 100
- Nozzle—Sprinkler

TRI-CON ALL PURPOSE NOZZLE

4-WAY
WATER
RELEASE
\$2.50



Complete with nozzle and
sprinkler base

The only nozzle with the high-velocity reversible cap
Strong stream—full flow
Trigger control (it's in the cap !!!)

Does over 100 jobs BETTER

Plant Foods



Grow prize winning
flowers & vegetables

Surface feeding (A) causes surface roots; dry local feeding (B) may burn rootlets. But Plant Marvel (C)—a scientifically balanced, food completely dissolved in water—uses Nature's LIQUID feeding method. You force deep, widespread, sturdy roots. Use it for luxuriant leaves, huge blooms, luscious fruit & vegetables.



PLANT MARVEL
\$1.25 CAN

Makes 250 gallons liquid plant food! Order a supply today.

Plant Marvel, 622 W. 119th St., Chicago 28, Ill.

HY-GRO SOLUBLE PLANT FOOD

(13-26-13)

For flowers,
potted plants,
vegetables and lawns



Brings a balanced diet right to the roots. Use according to directions on package for starter solution and transplanting. Easy to use.

3 oz. 30¢—20 oz. \$1.00
—10 lb. \$4.50. Also in 25,
50 and 100-lb. sizes for
estates and larger growers.

Ask for
FREE booklet

A PRODUCT OF McCORMICK & CO.

TRIPLE 20 PLANT FOOD 20-20-20 ANALYSIS

RAISE AFRICAN VIOLETS?
FLOWERS, VEGETABLES,
LAWNS?

Triple 20 Concentrated Plant Food will grow beautiful healthy blooms and crops. Makes grass grow thick and fast. Instantly and completely water soluble. Contains all needed food elements. Immediately absorbed by plants for faster growth than common, slow eating dry fertilizers. Simply apply as you usually water plants for foliage and root feeding. Won't burn plants. Best for starting cuttings and transplants. Also to soak seeds, 1 lb. feeds 50 ft. of row, 1,000 sq. ft. of lawn.

Another Guaranteed Carbola Product
Carbola Chemical Co., Natural Bridge, N.Y.

How to Build Healthy Soil with PEAT MOSS

Peat Moss literally gives soil new life—by adding pure, weed-free, spongy, 98% organic vegetable matter. It opens up the soil, admitting vital air and moisture, and acts as a reservoir for plant food, releasing it to the roots as they need it. Thus, it insures maximum return from seed, fertilizer and time invested.

Peat Moss loosens heavy soils . . . gives substance to light soils . . . gives all soils loam-like texture . . . prevents surface crusting.

FLOWERS, BULBS

Mix well a 2 to 3 inch layer of moist Peat Moss into top six inches of soil. Add plant food and (except for acid-loving plants) 5 lbs. of agricultural lime per bale of Peat Moss.

VEGETABLES

Spade a 2 inch layer of moist Peat Moss into top 6 inches of soil. Add agricultural lime (10 lbs. per 100 sq. ft.), except for root crops like potatoes, turnips, carrots, etc.

ROSES, SHRUBS, TREES

Dig large hole so roots can spread freely. Mix 1/3 moist Peat Moss with 2/3 soil (by bulk) for fillback. Settle soil in filled hole by soaking. A 2 inch mulch of moist Peat Moss will doubly ensure sturdy growth.

EVERGREENS

Plant broad-leaved (Azaleas, Camellias, Rhododendrons, etc.) in a 50-50 mixture of moist Peat Moss and soil. For cone-bearers (pines, spruce, hemlock, etc.) use 1/3 Peat Moss, 2/3 soil. A 2 to 4 inch mulch of Peat Moss improves appearance.

LAWNS (new)

Mix 1 to 3 inches of Peat Moss into top 6 inches of soil. Rake in plant food, sow grass seed, roll (in dry weather), and water gently.

LAWNS (established)

Topdress with 1/4 inch Peat Moss and rake it in well every six weeks. To renovate poor spots, work 1/2 inch Peat Moss into soil, add fertilizer, reseed, and water well.

INDOORS

House Plants: Mix 1/3 Peat Moss to 2/3 good loam. A pinch of plant food helps if yellowing of leaves develops. Bulbs: Fill container with Peat Moss. Keep moist. For tulips use 1/3 Peat Moss, 1/3 loam., 1/3 sharp sand.

COMMERCIAL

Propagating: Use a 50-50 mixture of Peat Moss and sharp sand. Transplanting: Mix 1/3 moist Peat Moss with 2/3 soil. Lining-out beds: Use soil mixture containing 25% Peat Moss for deciduous stock, up to 100% Peat Moss for Azaleas, Rhododendrons, etc.

ANYWHERE, STORING

Use Peat Moss any time to improve poor soil and maintain good soil. Store and ship bulbs, roots, fruits, vegetables in Peat Moss. It is light, absorbent; it insulates and protects.

As a Summer Mulch — When plants are growing well, after cultivating soil, mulch around them with 1 to 4 inches of moist Peat Moss. This will keep down weeds, make further cultivation unnecessary, keep the soil moist and cool, and the roots vigorous, and give your plantings a neat, well-groomed appearance.

As a Winter Mulch — Peat Moss is a splendid insulating material. It prevents root injury by soil-heaving (alternate thawing and freezing). After the first freeze, apply about 2 inches of Peat Moss around all plants and hill up about 10 to 12 inches around the base of roses and shrubs. Apply moist to prevent blowing. In the Spring, Peat Moss can then be raked off and used elsewhere.

GARDEN GLOVES

Garden Gloves—Protect your hands—wear gloves in your garden! Canvas or leather, in sizes for men and women.

GARDEN HOSE

Visit Our Store for our newest offerings. Garden hose is now available in good quality and quantity.

LABELS

Pot or Garden Labels (Wooden)—Used for marking plants in pots or seed flats, 4 inch, 12 inch.

Wood Tree Labels, Wired. Painted wooden labels equipped with wires, for marking trees or shrubs; also used extensively for labeling dahlia tubers.

PLANT SUPPORTS

Bamboo Stakes—Green, pencil-thickness. 2 ft., 3 ft., 4 ft.

Dahlia or Garden Stakes—Wooden—Painted green. Strong and durable. Almost rot-proof. Will last several seasons. For supporting dahlias, young trees, etc. 4 ft., 5 ft., 6 ft.

POTS AND SAUCERS

Standard Earthen Flower Pots. Many sizes, from 2½ in. to 12 in. diameter.

Earthen Flower Pot Saucers. 3 in. to 12 in.

Red Paper Pots. Excellent for growing seedlings or for packing plants for shipment. 2¼ in. to 6 in. diameter.

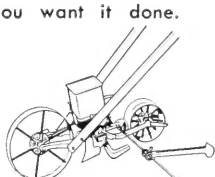
Planet Jr.®

EVERYTHING A GARDEN NEEDS

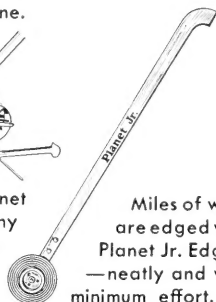


Powerful 1 or 1½ h.p. motors make light of work. Attachments include: Lawn Mower hitch, plow, cultivator, fertilizer, hauling cart, seeder, snow plow, grader, rotary tiller.

Planet Jr. Single and Double Wheel Hoes have been designed by practical men to do the proper kind of work—the way you want it done.



Planting with a Planet Jr. Seeder has many advantages. The No. 4D Seeder is ideal for a small garden.



Miles of walk are edged with Planet Jr. Edgers—neatly and with minimum effort.

Famed for 80 years as makers of dependable hand, animal and tractor-powered tools for farm and garden.

S. L. ALLEN & CO., Inc.

5th St. & Glenwood Ave., Phila. 40, Pa.

GENERAL ELECTRIC®

HEATING CABLE SETS



These frames of young plants will make fast growth in this cold frame, equipped with G-E heating cable sets.

Large, strong plants ...and more of them ...with these

GENERAL ELECTRIC HEATING CABLE SETS

A little heat in the soil does wonders — in hotbeds, cold frames, in greenhouses — prevents root rot and makes plants grow faster than ever before. That's what G-E soil-heating cable does — supplies gentle, even growth-producing heat that enables you to transplant earlier than ever before.

G-E heating cable is laid 4 to 6 inches below the soil surface. It comes ready-to-install in sets of 30 and 60 feet of cable formed into 15-foot and 30-foot "hairpins" with ends assembled into a weatherproof plug ... for 110 volts. Also 120-foot sets formed into 60-foot "hairpins" for 220 volts. A thermostat can make the operation automatic.

G-E heating cable sets are worth investigating. Let us show them to you.

PRUNE

for BEAUTY, HEALTH
AND YIELD

"Snap-Cut"
world's finest
and most
popular
pruner



"HOW TO PRUNE," 28-page illustrated book available by coupon packed with each tool. The "Snap-Cut" and this book on how to do it are a perfect combination.

And just as fine as the "Snap-Cut" pruner are these other Seymour Smith garden tools

**GRASS SHEARS • HEDGE SHEARS
LONG HANDLED PRUNERS & PRUNING SAWS**

SEYMOUR SMITH

1st IN GARDEN TOOLS

SINCE 1850

Hotkaps*



BIG GARDEN PACKAGE of 25 only 95¢—Setter Free
Larger Pkgs. of 100, 250, 1000 for Commercial Growers

'TWIST-EMS'*



**Handy! Speedy!
PLANT TIE**

Strong, dark green "invisible" tapes with wire reinforcing—protect stems, speedily and permanently support annuals, perennials, vines, shrubs, and vegetables.

Box of 200, 4-inch size, 25¢. Box of 100, 8-inch size, 25¢.
Box of 100, 16-inch size, 50¢. Pkg. of 50, 8-inch size, 15¢.
Pkg. of 35, 8-inch size, 10¢. 250 ft. continuous roll, \$1.00.

TRAIN-ETTS*



Ideal support for SWEET PEAS, GARDEN PEAS, POLE BEANS, CUCUMBERS, TOMATOES Hung in 5 minutes. Doesn't rot like string, nor burn tendrils like wire. 3 sizes
60-inch x 72-inch, 65¢
60-inch x 96-inch, 85¢
60-inch x 180-inch, \$1.25

KELLER'S

A Good Name to Remember **MORE THAN JUST A STORE**

Keller's is more than an ordinary store. Year after year we work hand in hand with the growers of this area—the home gardener, the market gardener, and the farmer. All that we have learned from this experience is always available to our customers. So, you see, we don't just sell seed and related merchandise. We furnish local know-how that comes from all this combined experience.

So, whether it's a question of seeds, or insect control, or soil feeding, or equipment—or any of the many other divisions of this business—you can always find dependable merchandise here.

KELLER'S PURE LAWN SEEDS: High germinating and best quality, chosen especially for use in our area. **Shady Lawn** best for shady spots. **Best Mixture** for the permanent lawn

PET SUPPLIES: A complete line of everything you'll need for your pets. **Dog Foods, Remedies, Sweaters, Beds, Supplies and Toys.**

Vigoro for beautiful lawns and gardens, and **Endo Weed** to get rid of weeds.


SUPPLIES: Garden tools, wheelbarrows, **Eazy Wear** garden gloves. Everything you need for the farm or garden.

GEO. KELLER AND SONS **909 Maine Street** **QUINCY, ILLINOIS**

All America Roses For 1954

LILIBET—Named in honor of the British Queen Elizabeth II. A hardy plant producing clusters of exquisite pink tones. Color ranges from light rose to soft dawn pink.

MOJAVE—Long slender buds of salmon, apricot and orange blend. Occasionally in cool weather the salmon changes to red, blended with the other two colors.



LILIBET
A.A.R.S. 1954



MOJAVE
A.A.R.S. 1954